THE MEDICAL JOURNAL OF AUSTRALIA

VOL. I.—25TH YEAR. SYDNEY, SATURDAY, JANUARY 1, 1938. No. 1.

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An Address.[1]

By R. G. QUINN,

President of the Queensland Branch of the British Medical Association.

IN acknowledging the honour you have done me in making me your President for the ensuing year, I wish to express my thanks and my pleasure. Dr. Price has created a standard of service to the profession which will be difficult to attain, but which, with your help, I shall endeavour to emulate.

Medical Service.

Transition periods are worthy of notice, even though, being in one, we lack perspective. Methods of medical service are changing rapidly all over the world, and the State is assuming more and more responsibility for the care of the sick. It is of interest, therefore, to examine the trend of events and to consider alternatives and possible improvements.

Private Practice.

Private practice, with honorary medical service in charitable institutions for the sick poor, has been made difficult for several reasons. Advances in medical knowledge make diagnosis and treatment of disease conditions more accurate and more effective, but they also add to the cost of investigation and treatment, so that fewer persons are able to afford the cost of medical and ancillary services. Advances in political knowledge make the burdens of direct and indirect taxation greater, so that fewer persons have incomes which enable them to meet emergency expenses.

Politicians also have not been slow to realize that offering something for nothing is profitable. They

[1] Delivered at the annual meeting of the Queensland Branch of the British Medical Association, Brisbane, December 10, 1937.

have had ready at hand a system of honorary medical service to the sick poor; and honorary service has been maintained with its extension to the whole community.

The plea that, as health is a community matter, a government must provide free medical, nursing and hospital service can be argued logically only if free food, clothing and housing are also provided. No community would be reasonably able to afford the latter, and it is extremely doubtful if any community could afford the former.

Institutional Service.

The medical service for which this State is now apparently striving is institutional. There will be large hospitals based on a geographical unit, with a specialist service based on anatomical units. The State will be divided into geographical compartments, to each of which a hospitals board will minister; individuals must be divided into anatomical compartments, to each of which a specialist will attend.

Under such a scheme it will become more and more important to be orthodox and to conform to geographical and anatomical standards; to live near an institution will be an advantage, but to suffer from only orthodox diseases will be a necessity. We have become so accustomed to stereotyped education that we now scarcely observe it as such; stereotyped sickness service will cause probably more general disturbance and certainly more serious results.

The best medical service must be an individual service; an institution may provide means of treating a disease, but will afford very few opportunities of treating the individual. Not only should the individual be treated in contradistinction to the disease, but also the service should be by an individual. A very serious difficulty of the large institution is this lack of personal contact; the patient, seen first by "A" and next by "B", and so on, does not get an ideal service.

Central base hospitals will also provide the most costly method of medical treatment, and a free institutional service will soon become an insupportable burden to any State. Indications are not lacking that the financial burden is already a very serious one in this State.

Of persons who seek medical advice, 80% or more are not in need of institutional care and can best be treated by a family practitioner. The family practitioner is in the best position to advise when further investigations are required and when hospital treatment is desirable. Herding crowds of patients into out-patients' clinics gives a service in no way comparable with that available to practically every patient of a family doctor.

Friendly society lodges, which have been built up very largely on the medical service provided, will obviously be crushed out of existence by a State-controlled free institutional service. This has already happened in several districts in this State where hospital group schemes have closed down lodge medical services and have even closed down the lodge itself.

A Department of Health.

The coordinating body, the present Department of Health, is deficient in nearly everything that might reasonably be expected of such a department. It provides little coordination of services, it makes little serious effort at preventive medicine and little attempt at health education, and manifests insufficient enterprise in research.

It is attempting to exercise more and more control over the treatment of the sick; it is subject to political influence, and therefore its primary consideration is to have evidence of its zeal; buildings can be photographed, and, if necessary, used for the purposes of political propaganda—it is difficult to take photographs of a service. There is no occasion for surprise, therefore, when we observe that too much emphasis is being laid on the erection of hospital buildings and that too little attention is being given to the provision of the best medical and nursing service.

Coordination.—Coordination of health services should surely be the important function of a health department. No such coordination is possible unless the complete cooperation of all workers is obtained. John Stuart Mill has said: "There is not a more accurate test of the progress of civilization than the progress of the power of cooperation." The yard-stick of cooperation is also a useful measure by which to test the adequacy of a health service. In the past the medical profession has found the greatest difficulty in making contact with the department and cooperation has been impossible. During the last few weeks, however, the Health Department of this State has, for the first time under the present *régime*, shown a willingness to cooperate with the medical profession in an endeavour to solve some of our important problems. I refer to the conference between the Minister, the Medical Board and the Branch on the subject of abortion, and to the discussion on the staffing of the Brisbane Hospital. We welcome this attitude and would assure the Minister and the people of the State that this Association, as the official representative of the medical profession, will always be ready to give whatever help is possible in all matters pertaining to the public welfare.

The recent parliamentary and Press campaign relating to the social evil of abortion could not be expected to achieve any good result, though it might possibly serve to advertise criminal abortionists. It is hoped that some good may eventuate from the recent conferences on the matter.

The heavy work of the honorary staffs at our public hospitals is occasionally given grudging recognition, but more often is the subject of bitter attacks.

Private hospitals can be helped to give better service to the community by encouragement to conform to the highest standards. Meddlesome interference will not improve standards. An example of

meddlesome methods was provided by the recent private hospital regulations, which were hastily amended, though not then perfected.

There is no need for the Department of Health to control every health service. Most actual services to the community are carried out far better by private individuals, who should be able to rely on the helpful advice and cooperation of the department in their effort to give community service.

Prophylaxis.—Prophylaxis should be a major activity of a health department. It is in this regard that we are probably least advanced.

Control of insect vectors of disease is one matter which immediately suggests itself. An excellent opportunity of tackling such a problem was presented when money and men became available a few years ago. Unemployment relief tax funds spent on mosquito control throughout the State, and on similar health services, certainly have provided a better return to the State than can be expected from chipping grass on suburban footpaths. Toowoomba, led by our retiring President, Dr. Price, has shown that mosquito control is possible and desirable.

Prophylactic work also includes improvements in the water supplies, sanitation service, and in the use and availability of foodstuffs; such work always repays the outlay in health dividends, and there is great scope for work on all these subjects, particularly in the more isolated communities.

Education.—Education in health matters must be a continuous effort. Especially in preventive medicine is it necessary to have an enlightened public opinion. The varying responses in different communities to diphtheria immunization indicate the importance of health education, and also the necessity for taking much trouble to explain the facts of preventive measures to the community.

In industry the continuous education of employers and employees to realize the importance of safe methods and healthy conditions of work, and to strive continually to improve working environment, is the only foundation upon which to build improvements in our industrial conditions.

The publicity which is at present given generously to the Health Department appears often to be too heavily weighted with political propaganda. Publicity could usefully be given to matters of health education, at least equally important.

Research.—Research offers an almost limitless field of activity. A few problems suggest themselves as worthy of further study on a scale beyond the scope of individual practitioners.

A continuously recurring problem is the number of hours which should be worked in industry. Our existing system appears to view the matter as entirely economic. The most important aspect of industrial work is the health of the worker; the hours and the conditions are primarily health problems. Much work has been done in the older and more densely populated countries on these lines; the War gave an impetus to such investigations. The optimum hours of work in a particular job can be, and in some cases have been, determined. Lighting, ventilation, dusts, noxious fumes and many other factors have an important bearing. These hours obviously will vary in different jobs, and a department of health, which had investigated these matters, could most usefully advise an industrial court about the optimum hours of work. Economic and other factors would require consideration, but the health aspect is certainly the most important.

Similarly, conditions of work are often unsatisfactory; industrial diseases and industrial accidents are far too common. No product of industry is worth the expenditure of human life and health; careful investigation and cooperation with the interested parties can make most occupations safe. Hazardous occupations must be made safe, and unless a commodity can be manufactured without endangering the life and health of the worker, the community should do without it.

Sound medical advice, the cooperation of the employer and the employee, and the sympathetic help of a department of health would reduce very considerably our present wastage of life and health in industry. At the annual meeting of the British Medical Association at Belfast this year some of these matters were discussed, and most interesting papers on "The Wider Issues of Health Legislation in Industry" were published in *The British Medical Journal* of September 25.

Another very serious problem which earnestly demands careful investigation and sympathetic advice is provided by the existence of relief workers. Their outstanding problems are how to live in health and comfort with their very meagre income, and in many cases how to reestablish themselves in the community as useful workers. The results obtained do not appear to be commensurate with the spending of two and a half million pounds in a year.

The Ideal Service.

Having mentioned some of the disabilities of the present medical service and of the service which appears to be developing, I shall consider some of the requirements of an ideal service.

The foremost consideration is that a health service is a community service; it should be able to satisfy the health requirements of the community not only for present, but also for future generations.

As our present-day society is based on a family unit, a family practitioner service should be the basis of any satisfactory scheme. It should provide free choice by the patient of his doctor and the right of a doctor to accept or refuse a patient; and the professional relationship between patient and doctor must be free from outside interference.

Specialist services, institutional treatment and ancillary services should be available and should be employed particularly on the recommendation of the family practitioner.

Finance for such a scheme must almost inevitably be by a form of insurance to cover some or all of

the expenses incurred. The necessity for compulsory insurance is realized more forcibly when we consider that only 10% of breadwinners in Australia have an income exceeding five pounds per week.

Payment must be on a scale which the average wage-earner and salaried worker is able to afford, and must be adequate to secure a good service by the medical practitioner, nurse and ancillary worker. It should further be arranged so that it would encourage all workers in the health services to improve their service continuously.

To ensure an efficient service there must be a high standard of training of medical and other graduates; facilities must be provided for post-graduate study at intervals; sufficient time must be allowed to ensure that each patient can be satisfactorily examined and advised; reasonable recreation time must be available to each practitioner; and adequate remuneration must be provided to attract the best type of medical graduate.

A medical service scheme, such as was adopted by the Queensland Branch and by the Federal Council of the British Medical Association, could be made the basis of a satisfactory community service. While the report to the Commonwealth Government on national health insurance by Sir Walter Kinnear advised a scheme which is only partial, it could be made a foundation upon which a complete service could be built. Even with the help provided by the working of such a partial service in the United Kingdom, various modifications would undoubtedly be necessary to conform to the different conditions in this country. It is most unlikely that any scheme could be introduced in a completely satisfactory form; as it was used, it would be modified.

The adoption of an insurance scheme based on a family doctor service does not necessarily imply the scrapping of the present large and expensive hospital buildings. Most of the accommodation available could be utilized as intermediate and public beds for patients in a complete insurance scheme. The amount of hospital accommodation required would be considerably reduced under such a scheme, and further expensive buildings would probably be unnecessary for a long time.

The money at present spent by the community on institutional services would be reduced, the contributions to the hospitals by the Government and local authorities would be considerably less, and money would thus be available for many necessary services which are at present neglected.

The important and urgent necessity is to adopt a reasonable basis of medical service and to modify it as required, instead of drifting along, as we are at present, on lines which are quite obviously unsatisfactory.

Summary.

The fault of the present medical service is that the average wage-earner and salaried worker cannot afford to pay fees for private medical service and ancillary services.

The fault of the institutional service, which is being developed, is that it cannot give individual medical service to the community, and it is probably the most costly method of giving an inferior service.

Further, the Department of Health is attempting to control treatment instead of functioning primarily as a coordinating unit.

The medical service, which should be evolved, will provide individual service to the patient with adequate provision for ancillary services at a cost which can be met. It will further provide a service which continually seeks additional knowledge of preventive measures against disease and disability, which ensures the dissemination of such knowledge and the stimulation of public opinion so that the knowledge will be utilized, and which will coordinate the health activities of the community to prevent waste of effort.

Such a service can be evolved so that it will maintain the interests of the public, the Government and the profession, not only without conflict, but with very great advantage to all.

ASTHMA IN CHILDREN.[1]

By D. L. BARLOW, M.C., E.D., M.D.,

Honorary Medical Officer to the Asthma Clinic, Adelaide Hospital and Adelaide Children's Hospital.

GREAT progress has been made in the understanding of asthma and in its management in the past fifteen to twenty years, and we have now reached the stage when most asthmatics can be freed from their attacks, or their attacks can be so greatly reduced in number and intensity as to be no longer a handicap. However, although we hope to discover simpler and more effective methods of treatment, my view of the immediate problem is that it is to obtain a better appreciation and a more general application of the knowledge already available.

In this paper no attempt is made to cover all the details of the subject, but special attention is directed to the following aspects:

1. Diagnosis should be made at the earliest possible stage, and then causative factors should be promptly investigated.

2. The importance of contact in producing sensitiveness to individual allergens must be recognized.

3. In children, as well as in adults, inhaled proteins, such as dust and dander, are the chief allergens.

4. The prognosis in asthma, unless it is complicated by organic changes, is good.

5. The question of prevention is worthy of greater attention.

[1] Read at the fifth session of the Australasian Medical Congress (British Medical Association), August, 1937.

6. The essential in treatment is the elimination, as far as possible, of the allergic excitant, and desensitization.

7. Nasal disorders in the asthmatic child are usually associated manifestations of allergy.

Diagnosis.

The early attacks in children are not infrequently thought to be due to bronchitis. The possibility of asthma requires to be kept in mind, as these seizures are not usually typical, especially in infancy; examination of the blood and of nasal smears for eosinophilia will, as a rule, establish the nature of the trouble. Bronchiectasis should not cause much difficulty in diagnosis, but the possibility of the two conditions affecting the patient is worth remembering.

Ætiology.

Heredity is important from the point of view of ætiology, but allergic manifestations are very common; and it would now appear that there is no class of individual which is proof against becoming sensitized, but that great variations of susceptibility occur, and that the degree of susceptibility is an inherited characteristic. Actual sensitiveness to particular proteins is not commonly inherited. Twins may both become sensitized, but the allergens may be different.

Environment has been rather under-estimated as a factor in determining sensitization. However, one repeatedly notices that it is the things to which the individual is much exposed that cause the sensitization; for example, feather or kapok bedding, especially if the covers are thin, and proximity to animals in the case of farming people. Thus it is obvious that repeated inhalation of the minute particles from such sources results in the more susceptible type of person becoming sensitized. The lesson from this in regard to prevention is apparent. In childhood the patient will often prove to be sensitive to food as well as to inhalant proteins, but only rarely are foods the main allergic factors in asthma. They may, however, cause other symptoms.

Pollens are sometimes of importance as a causative factor in asthma of children, but usually the patient is also sensitized to dust or dander proteins, and the latter may be of greater significance.

Microorganisms, by keeping up chronic bronchitis, may make the patient more susceptible to the effects of foreign inhaled proteins, and may also themselves act as sensitizing agents, as either the organisms or the products of their activity can act as allergens. An example of such sensitivity occurred in my experience which illustrates the subject well:

> A patient with asthma was noticed to be always much worse when certain small staphylococcal infections manifested themselves, and when tested with a sterilized culture of the organism (*Staphylococcus aureus*) he gave a very pronounced prompt skin reaction. In treating him it took me many weeks to reach a dose of one million organisms subcutaneously, as anything beyond a very small increment in dosage would bring on a mild asthmatic spasm.

Nasal and paranasal disorders in asthmatics require careful consideration, and allergists are now gratified to note that their efforts are rapidly bringing about a conservative attitude in regard to surgical measures in allergic patients. Very frequently the trouble in the nose or paranasal sinuses is allergic, and may or may not be due to the same proteins as those affecting the bronchial tubes. Although the appearance of the nasal mucous membrane, when affected by allergy, is often unmistakeable, nevertheless this is not always so, especially if there is infection also, and radiographic examination of the sinuses has serious pitfalls, for the shadows cast by chronic allergy and chronic infection can not usually be distinguished with certainty. Failure to realize this fact has resulted too frequently in a report of "chronic infection" with subsequent surgical intervention followed by disappointment. The correct attitude is to report the appearances of pathological thickening of the mucosa; the clinician should then decide as to the nature of the condition, having regard to the history of the patient, to the appearance of the nasal mucosa, and to the result of examination of nasal smears and blood films for the presence of eosinophilia. The blood examination applies to patients who have no typical asthma, and merely indicates the probability of an allergic basis.

Tuberculous infection and asthma have not been frequently associated in children as far as my experience goes, but tuberculin tests have not been regularly made; and it would be interesting to hear from somebody who has so tested a series of patients.

There are numerous other factors in the ætiology of asthma, including the general state of health, psychological conditions, climatic influences, personal habits as regards diet, clothing, exercise *et cetera*, but I do not intend to discuss these particularly here.

Asthma is an allergic reaction, though many factors besides exposure to the sensitizing proteins may determine the frequency and severity of the attacks. Therefore it is necessary that a detailed investigation regarding all possible causative factors should be undertaken when the diagnosis of asthma is made, in order that each may be corrected. It is most desirable that the allergic irritant should be tested for at this stage, and that the matter be not delayed until other measures have failed to rid the patient of attacks. Careful comparison of history with results of skin tests is necessary, that a proper perspective may be obtained.

Treatment.

Preventive Measures.

It has already been indicated that more can be done in the way of preventive measures than is generally realized. A widespread movement to reduce atmospheric allergens in houses is overdue; the same applies to offices and workshops. In the latter some improvement has taken place latterly. However, if the public were educated to realize that not only asthma but also the very prevalent so-called "nasal catarrh", are largely caused by atmospheric "dusts", then a steady reduction of the

chief offending articles would occur. Special attention should be given to mattresses and pillows, but padded quilts, cushions and upholstered articles of furniture all contribute to the atmospheric pollution unless special impervious fabrics are used for coverings.

These precautions, whilst they are of general application, become urgently called for in the case of families with strong allergic histories. The keeping of animal pets indoors is surely unnecessary, and although many people suffer no ill-effects from the practice, it should be discouraged, as nobody can be sure of immunity. It is often overlooked that a quantity of animal dander can be taken indoors on coats whose wearers have been handling horses or cows. Chaff dust is the cause of much respiratory allergy, but more so in the case of adults than of children; yet greater care could minimize this.

Therapeutic Measures.

Time limitations will not allow me to discuss general management (including dietetic and psychological management) or drug treatment, excepting two aspects. These are the use of breathing exercises and the inhalation of adrenaline chloride.

Breathing exercises have become more widely used latterly; in my practice they have always been recommended. They are of undoubted value, especially in children, but a tendency in some quarters to expect lasting results from such exercises without a full investigation of the case, and without suitable measures to deal with the cause, is regrettable.

The inhalation of adrenaline chloride spray from an atomizer employing a concentrated solution (such as one in a hundred or one in fifty) is most valuable in the relief of attacks, but it is important for the medical adviser to inspect the instrument used, in order to be sure that the spray it gives out is both fine enough and of sufficient volume.

Although this paper does not deal fully with the general management of the asthmatic child, this is not because of any intention of minimizing the importance of all measures which help to improve general health, but rather because these are already generally appreciated.

Good psychological management is often of great moment in achieving results.

The elimination of allergens to which the patient responds should be thoroughly carried out as far as it is practicable; in hospital practice a properly instructed almoner can do great service in this direction. With children who have only suffered slightly, such elimination may result in the cessation of symptoms. Occasionally, the omission of a food (such as egg) to which the child reacts strongly will produce immediate benefit, but more often the food allergy has little effect on the asthma, the latter depending on reaction to inhalant allergens.

Desensitization is usually necessary, for completely allergen-free conditions are not often obtainable. Air-conditioned rooms are available to the wealthy, but in this dry climate the general atmosphere contains a large quantity of fine organic dust.

In some cases the elimination of a septic focus is required, and this should be done without delay, and tests should be made to discover whether the patient is sensitive to the organisms involved. If this proves to be the case, desensitization with this as well as with inhalant allergens should be undertaken.

In a few children, vaccine therapy to clear up an associated chronic bronchitis is needed.

It is necessary to stress certain essentials in the successful application of desensitization, for unfortunately considerable disappointment has occurred as the result of misdirected efforts.

It can not be too strongly emphasized that the investigation as to sensitiveness must be efficiently carried out, potent solutions being used. It is not necessary to test with very numerous proteins with which the patient is never in contact, but all the everyday articles must be tried, and any others which may be indicated by the personal history. The results should be interpreted in conjunction with the history, and it is to be remembered that although a patient may be in contact with a certain allergen almost daily, yet attacks may be only occasional; otherwise confusion may arise.

In carrying out the inoculations, the clinician must deal with each case individually, and intradermic tests should first be made with dilutions of the extract to find out the weakest dilution which will cause a definite response. Inoculation is then commenced with a small dose of this. The rapidity with which the largest doses can be reached depends on the occurrence or not of local or general reactions. If at any stage these should occur, or if symptoms of asthma are present, it is necessary to proceed cautiously. Sometimes the addition of 0·1 or 0·2 cubic centimetre of a one in one thousand solution of adrenaline is a good plan.

Even in the case of children it is usually advisable to reach a dose much greater than the one cubic centimetre of D strength which has been commonly recommended. Extracts prepared by using a fluid containing 50% glycerol with sodium or potassium phosphates as buffer agents, retain their strength for a lengthy period, whereas those prepared in Coca's solution are not so reliable.

The duration of desensitization treatment is a difficult matter to be dogmatic about, and it is not always easy to persuade people of the desirability of going on for some time after all symptoms have been absent. However, it is undoubtedly the best plan not to discontinue for several months (in the later stages a dose need only be given every ten or twelve days), for if this is done, recurrence is much less likely.

The prognosis in asthma in children can now be said to be quite good, providing the management is satisfactory, and failure to obtain results from desensitization usually means incomplete diagnosis or inefficient therapy, or unsuitable general management of the child.

Exposures to ultra-violet light have exercised a beneficial effect in some cases, and this is a useful supplementary method of treatment in localities where sunlight is scarce. Non-specific protein

therapy is capable of giving considerable benefit in a limited number of cases, but these are better dealt with on the lines advocated in this paper; for, as the cause is not touched, recurrence is very likely.

Bray's method of treating any patient with a mixture of common inhalant allergens without testing can, of course, do good to some; but the slight saving of time does not compensate for the less satisfactory results.

Education in Allergy.

There can be no denial of the fact that more attention should be given in the student's training to the imparting of some practical knowledge of the part played by allergy in producing many common and distressing disorders. Graduates are still passing out into practice with a most inadequate equipment in this matter, but now that so much can be done to relieve the sufferers from allergic disorders, it would surely be reasonable to expect senior students to spend a few hours in an allergic clinic.

INCISIONAL HERNIA.[1]

By A. E. COATES,
Melbourne.

THE subject of this paper is of interest to all who practice surgery of the abdomen. All surgeons of experience are aware that a certain proportion of laparotomies are followed by incisional hernia. The factors involved in the development of these troublesome herniæ are not always obvious. In some cases infection, over which the operator has no control, is responsible for the breakdown of the abdominal wall; and in other cases drainage, which was an essential part of the operative treatment, results in herniation. Perhaps in certain cases the incision has been wrongly planned, a factor which will be discussed later. Faulty suture of the peritoneum is a cause in many cases; the omentum, attempting to seal the defect, projects through the gap, and there is early hernia with all the potentialities of this dangerous condition.

As a basis for discussion of the subject I have analysed the histories of 144 patients with incisional hernia who were operated upon at the Royal Melbourne Hospital between 1931 and 1936. Forty were males and 104 were females. All but twenty-two were over forty years of age; that is, 83% were of middle age. There were eight patients under thirty years of age, of whom seven had contracted herniæ after drainage of appendiceal abscess. The large percentage of females is perhaps associated with the relatively wider abdomen and the tendency to weakness of the abdominal wall, aggravated by child-bearing. The large percentage of persons in middle age is, of course, in keeping with the general flabbiness which develops with advancing years. The previous operations responsible for the herniæ were as follows: appendicitis, 57; gall-bladder disease, 17; female pelvic conditions, 36; and the remaining 34 were various operations for ruptured spleen, intestinal obstruction, carcinoma of the colon, prostatomegaly, perforated peptic ulcer and umbilical hernia. The interval between the appearance of the hernia and the previous operation was reported as under three months in 38 cases, that is, in 27% (it was less than three weeks in 27 cases); under six months in 52 cases, that is, 36%; thus 63% of patients were aware of the presence of a hernia within six months of the laparotomy. Since few patients resume hard work within three months of an abdominal operation, it is probable that most of these patients had developed a hernia much earlier, but had not noticed it. This point is of importance and has been emphasized by King,[1] who has demonstrated the production of experimental hernia in animals. The difficulties of suturing securely the peritoneal layer in paramedian incisions are well known, and the tearing out of a suture with resulting omental herniation is the commencement of the protrusion. Similarly, the necrosis of the peritoneal line of suture in proximity to a drain tube is another causative factor. Methods of overcoming these difficulties will be dealt with in the appropriate section of this paper.

The types of incision employed were: upper paramedian incisions (of which 16 were necessary on account of gall-bladder diseases), 20, that is, 14%; lower paramedian incisions, 33 (23%); lower mid-line incisions, 44 (30·5%); McBurney's muscle-splitting incision, 38 (27%); Kocher's subcostal incision, 3; umbilical incisions, 3; Battle's right-side incision, 1; transverse lower incisions, 1; and oblique loin (renal ureteric) incisions, 1.

McBurney's incision is the usual incision employed for acute appendicitis in cases that are well defined. The lower paramedian incision is used frequently in ill-defined "acute lower abdomen". The upper paramedian incision was the customary approach to the gall-bladder and duodenum during the period under review, but the Kocher incision was employed by some surgeons. The relative proportion of Kocher incisions to paramedian incisions at the Royal Melbourne Hospital for gall-bladder surgery for the years 1928 and 1929 may be found in a review of gall-bladder disease and its surgical treatment by Dr. B. T. Zwar;[2] there were 179 paramedian and 19 Kocher incisions. In that series there were no herniæ after Kocher incisions, but eleven incisional herniæ followed paramedian incisions, that is, in 6% of cases. The small proportion of herniæ occurring after Kocher's incision is of note. In the three cases of hernia here reported, one followed an exploratory Kocher's incision, which was enlarged to permit of appendicectomy, the diagnosis being mistaken. The large proportion of lower mid-line incisions followed by hernia is significant. Drainage had been employed in thirty-five cases at previous operations, as reported by the patient or

[1] Read at the fifth session of the Australasian Medical Congress (British Medical Association), August, 1937.

found in the history. This figure is probably too low, as some patients would not know whether drainage had been used or not.

Complications which might predispose to hernia were investigated, and it was found that twelve patients were suffering from chronic cardiac and respiratory disease, two patients were diabetics, two had renal complications and four suffered from other abdominal and general disease. Of these, one had fatal cancer of the pancreas and one a fatal carbuncle.

As many of the patients had been operated on previously in other hospitals or in outside practice, it was impossible to determine how many suffered from acute respiratory trouble or from abdominal distension as an immediate sequel to operation. Such complications must be considered when an attempt is made to classify the aggravating factors involved.

Three patients were suffering from multiple recurrent incisional hernia.

Forty-three patients (30%) were suffering from intestinal obstruction; 41 of these had had lower abdominal incisions and two had had upper abdominal incisions. Several of the patients were described as suffering from loculated herniæ. It will be noted that the lower abdominal incision is more prone to develop hernia with obstruction. Sixty-two patients were described as suffering from large herniæ and 51 as suffering from small herniæ. The contents of the sac recorded in 59 cases were as follows: omentum in 56 cases, small intestine in 45 cases, large intestine in 15 cases. Most of the last group of patients had had appendiceal incisions of the McBurney type, and the hernia contained caecum. Omentum and small intestine were present in 19 cases, omentum alone in 34 cases, large and small bowel in 8 cases (mostly of appendiceal incision), omentum and large bowel in 3 cases, and small bowel alone in 18 cases.

The commonest content of the sac is omentum, reported in fifty-six cases (40%) and probably present in many more. In my own experience, omentum is almost always present in the sac of incisional hernia. Resection of bowel was performed in one case only (small intestine), ileostomy was performed in two cases, and short circuit was performed in one case.

The above-mentioned facts indicate that strangulation of the bowel is a rare complication, but that obstruction of the small bowel and strangulation of the omentum are the more common emergencies. The remaining 101 patients who had no symptoms of obstruction came to operation because of vague pains at the hernial site, a feeling of weakness and loss of support. The lower abdominal herniæ are more liable to give the patient trouble than are upper abdominal herniæ.

There were eight deaths. Two of these patients were not operated on, being too ill; one had cancer of the pancreas and one had a large carbuncle which proved fatal. Three patients had small bowel obstruction; on one of these ileostomy was performed, and one had renal complications.

The actual mortality from the hernia and its immediate complication was a little over 2%. When one realizes that not all patients with incisional hernia come to operation, but that many carry on their work, wearing abdominal belts and other accessories, the relatively low mortality from operation (and that because of obstruction) should encourage surgeons to undertake repair of the hernia, which is a cause of discomfort and a serious handicap to the labouring man or woman. The mortality is almost entirely avoidable.

The suture material used in the previous operation was not known. Repair of the incisional hernia in most cases was carried out by excision of the scar, definition of the anatomical layers and suture with chromicized catgut. Overlapping of the aponeurosis was carried out in eleven cases. *Fascia lata* was employed for suturing in sixteen cases, and silk was used in five cases. Filigrees had been used in two cases in which there had been recurrence.

The following remarks are based on personal observation of the human abdomen at operation, on a perusal of the rather scanty literature on the subject and on a consideration of the anatomical and pathological problems involved. An attempt will be made to point out certain modifications of the usual surgical practice which may possibly lessen the incidence of post-operative hernia. The methods of repair will also be discussed.

Current surgical literature devotes little space to this subject. The fact that a patient recovers from a severe abdominal malady as a result of a timely surgical operation offsets the later occurrence of a relatively minor disability in the form of an incisional hernia. A little care or forethought, however, in the planning of the original operation may help to minimize the liability to rupture. It is not suggested that these considerations should loom too large before the operation, for it is essential that adequate access be obtained and that the urgent demands of the patient for surgical relief should be satisfied.

Correct diagnosis is a prerequisite of a well-planned operation. Not only is it desirable that the nature of the lesion should be determined, but also the anatomical site of the diseased organ. An illustration of these remarks may be found in the case of acute appendicitis. Having determined that the patient is suffering from this disease, the surgeon must decide in which part of the abdomen the vermiform process is situated. The symptoms may suggest that it is in the usual position in the right iliac fossa, or it may be that right flank rigidity or loin tenderness indicated a retrocaecal position. Acute tenderness *per rectum* and the occurrence of associated bladder symptoms may induce one to believe it lies in the pelvis. When the patient is anæsthetized a lump may be palpable. Instead of incision of the abdominal wall at some spot fixed in the mind by a text-book diagram, a

rational planning of the incision may be made so that a minimum of retraction will be necessary and the incision will not need to be too destructive. The build of the patient requires some thought. A stout man with a wide, muscular abdomen may prove a difficult subject for operation if the abdomen is opened by a lower paramedian incision and an attempt is made to deliver an adherent, laterally-lying appendix. An oblique incision of the McBurney type would provide better access. Similarly, a broad-chested patient with a wide angle between the costal margins, suffering from cholecystitis, is more suitably operated on through a Kocher or transverse incision. The liver tends to bulge out of the abdomen, especially if the head and chest are elevated, and the gall-bladder can be removed without the surgeon struggling with retractors or packing off the herniating small bowel; this occurs if the paramedian incision is employed. A patient who is known to have a chronic cough should have an incision so placed that the minimum of strain will be placed on suture lines. Transverse or oblique incisions are better than vertical ones for such patients. The long slender abdomen, on the other hand, would be more appropriately opened by a vertical incision of the paramedian type, the rectus muscle being retracted laterally. The incidence of respiratory complications after transverse incisions is less than when upper paramedian incisions are employed. Nursing sisters who have watched such patients for years have informed me that they prefer to nurse patients who have had the Kocher or transverse type of incision. Pain is less, and if coughing occurs there is much less distress or fear on the part of the patient of the suture line giving way. In the neck it is customary to plan incisions along the skin creases; why is it not so in the abdomen? The fear of causing damage to the nerves supplying the rectus muscle naturally deters the operator. Lange's lines should be studied in individual cases.

Wakeley and Davis[3] have stressed the value of transverse incision in upper abdominal surgery in the light of recent investigations on the anatomy of the intercostal nerves. Clinical experience is further supported by an interesting observation by R. D. Wright on the limited contractility of the upper rectus muscle.[4] In a stout patient in whom the upper part of the abdomen is broad I usually employ a rather transverse Kocher type of incision, dividing the rectus muscle and its anterior sheath, then splitting the external oblique and internal oblique muscles for a short distance lateral to the rectus muscle. Any nerves passing to the rectus muscle are thus seen and avoided. The approach to the gall-bladder and the duodenum is particularly good. No retraction is required. Suturing is easy, because the transversalis muscle frequently extends as a muscular layer almost to the mid-line behind the rectus muscle and is adherent to its fascia and to the peritoneum. The closure of the latter (usually difficult in the paramedian incision) is rendered delightfully easy. I believe the paramedian incision a better one for exploration of the bile ducts and the pancreas, especially in the long thin abdomen. A modification of the usual paramedian incision has been recently described by C. Jennings Marshall.[5]

The paramedian incision is such a useful one for exploration that it will always remain a standard approach to the interior of the abdomen. Similarly, the mid-line incision, for obvious reasons, will continue to be the method of choice for exploring the pelvis. The transverse lower abdominal incision has a definite place, however, in bladder surgery. My own limited experience of this incision agrees with that of others, such as the late S. Harry Harris, whose choice of the transverse incision for his finished technique of a prostatectomy is worthy of special notice.

The drain tube is a necessary evil. The correct placing of the tube and the secure suture of the peritoneum in its neighbourhood may lessen the tendency to hernia from this source. Obviously, many patients who have undergone appendicectomy require drainage, as also do patients who have had gall-bladder operations. In the former it is advisable to drain the area where infection is most likely to develop or where already pus has accumulated. It is necessary to drain the right iliac fossa in cases of appendiceal abscess or in the presence of a gangrenous mesenteriolum. The tube may be snugly placed down to the appendiceal stump and brought out through the muscular part of the McBurney incision rather than through the medial aponeurotic area. Careful suture of the peritoneum with chromic catgut, care being taken that an extra interrupted stay suture is put next to the tube, should prevent pressure necrosis by the tube on the suture line. If the pelvis is to be drained, this should be done through a suprapubic stab and not through the original McBurney incision. I have seen two cases of secondary hæmorrhage from the iliac artery caused by pressure of a drain tube from the pelvis through the McBurney incision. Moreover, if a paramedian incision is employed, it is better also to drain through a separate stab opening, but care must be taken to assure that the tube is not nipped by the muscle through which it passes. In the upper part of the abdomen drainage through the lateral muscular part of the Kocher incision is unlikely to be followed by hernia provided that extra interrupted stay sutures through the peritoneum are employed near the tube. Stab drainage through the rectus is permissible with the paramedian incision and allows complete closure of the abdominal wound. The method of suture of the peritoneum is important. Accurate apposition of the peritoneal edges, not even the smallest gap being left, is the only way to prevent a tiny omental tag herniating. Through-and-through all layers silkworm gut sutures are dangerous.

In a study of abdominal wound disruption with special reference to the catgut employed, H. P. Jenkins[6] has stressed the importance of using catgut which retains its tensile strength for fifteen to twenty days. The forty-day chromicized catgut

approaches this specification more nearly than the twenty-day. This author insists that the continuous catgut or even chromicized catgut suture cannot be relied upon in the presence of a drain tube. Hence the necessity of an interrupted chromicized gut suture or two through the peritoneum in the vicinity of a tube. The continuous Lembert suture is probably the safest method of bringing the peritoneal edges together. The ordinary continuous suture tends to cut out of the peritoneum. The effective closure of the peritoneum at the upper and lower ends of the incision is especially important. It might truthfully be stated that most incisional herniæ commence at the time of operation.

In suture of an abdomen, it is desirable that the anæsthetist cooperate with the surgeon in pushing the anæsthetic so that relaxation is improved. During intraabdominal work the anæsthetic may be reasonably cut down, but for effective suturing an absence of straining is necessary. In difficult cases of mid-line or paramedian incision I have found the following manœuvre of value. As the surgeon draws the peritoneal suture taut, the assistant presses the abdominal wall by supporting the flanks. Dragging the sutures through without this precaution is liable to cause them to cut out of the deeper layers. Where the continuous suture has cut out an interrupted suture should be inserted. Unless this precaution is taken, hernia of a piece of omentum into the gap is certain to occur. The use of a spoon or of a piece of rubber tire as a protector of the bowel and omentum during suturing is to be recommended. A linear suture along the frayed peritoneal edge may help to overcome the difficulty of cutting out of the continuous stitch.

The closure of muscle layers should be carried out without undue tension. Interrupted sutures for the anterior sheath of the rectus muscle are advisable. If a continuous suture is employed, it should be reinforced by several interrupted sutures. Knots should be tied three times. Catgut swells in a day or two, and allowance must be made for this fact. If muscle is sutured, apposition is all that is necessary. Strangulation of tissue by tight suturing is to be deprecated. Silkworm gut or other forms of tension sutures should pick up the anterior layer to prevent dead space. Careful hæmostasis in the rectus muscle and sheaths prevents hæmatoma formation, with the possibility of subsequent suppuration and digestion of the suture line.

Care should be exercised in all abdominal cases to prevent as far as possible undue distension. The use of the rectal tube, heat applied to the abdomen and discreet use of purgatives should help to prevent undue vomiting and paresis of the bowel. In stout patients, especially if they are subject to respiratory disorder, the method employed by A. R. Dickens[7] for the relief of tension has much to recommend it. A heavy canvas belt, suspended by weights and pulleys from a longitudinal beam, holds up the sides of the abdomen and prevents sagging, with consequent drag on suture lines if such are vertically placed.

Methods of Repair of Incisional Hernia.

The simplest incisional hernia is that found in the right iliac fossa, the result of a muscle-splitting incision. There are two types of hernia here, one in which, as the result of an abscess, the destruction of muscle permits the caecum to bulge so that there is a thin layer of skin covering a balloon of this portion of the gut, the other in which a gap is left in the peritoneal suture line, either because of a drain tube or because of faulty suture of the peritoneum allowing herniation of a tag of omentum. Section of the ilio-hypogastric nerve[8] has been said to cause weakness of muscle and to favour herniation locally and also possibly in the inguinal area. In the first case a diffuse bulge and in the second a small knuckle may be found. Repair is easily effected by careful dissection of the skin, and if necessary by the excision of the papery covering of the caecum, the removal of any tag of omentum and a careful suture of the peritoneum and the muscle layers with chromicized catgut. Suturing should not be too close nor should large bites of muscles be taken. Freshening of the smooth edges of the muscle ring is desirable. Care must be taken not to disturb the muscle layers more than necessary, as old infection may light up and prejudice the repair.

For the repair of larger paramedian or mid-line incisional hernia the same methods are adopted, but modifications are often necessary. Excision of the scar and accurate dissection of the aponeurotic and muscle layers are advisable. The sac is frequently opened early in the proceedings, the bowel is returned to the abdomen, and any tags of omentum are removed. The empty sac may then be seized and dissected out of its bed beneath the fat. Multiple compartments are often found. The neck, or necks, are then identified and the peritoneum of the sac is divided about 1·25 centimetres (half an inch) outside the aponeurotic orifice. Suture of the peritoneum is then easy, as the fascia outside it is generally thickened and makes good suturing material. A continuous suture of chromicized gut, number 1 or 2, securely closes the gap. The aponeurosis around the neck is then dissected to lay bare the normal anatomical layers. These are freshened and sutured without tension with successive lines of interrupted chromicized catgut or fine black silk. If a large subcutaneous cavity is left, a dependent drain of corrugated rubber is a wise precaution. I prefer silk to catgut for the aponeurosis. When tension and a definite loss of tissue are found, two courses are open: either a repair may be made by strips of *fascia lata*, "darning the hole", or a flap of the anterior sheath of the rectus muscle may be turned over from each side and overlapped,[9] being sutured with fine silk. This latter method, described by Rothschild, is said to be especially useful in large mid-line herniæ. I have had no experience of the second method, but I have employed with success the Gallie technique of fascial strips on several patients. Tension must be avoided even when *fascia lata* is used; the material

should be used to replace absent tissue, that is, it should "darn" the gap.

In large mid-line herniæ the method described by R. Wood Power[10] is another possible means of closing the gap. This author advises making a longitudinal incision in the anterior sheath of the rectus muscle some distance from the mid-line, thus releasing the rectus sheath and allowing apposition of the edges of the aponeuroses in the mid-line without tension. He states that he has experienced no trouble from the uncovering of the rectus muscle in its outer part. Placing of the patient in the Trendelenburg position may assist the surgeon in such cases.

There are not many herniæ which cannot be soundly repaired by careful dissection and by apposition of the fibre muscular layers with interrupted fine silk sutures. Silkworm gut tension sutures should pick up the aponeurotic layers and should be left *in situ* for at least two weeks. Post-operative distension should be avoided, and the abdomen should be firmly strapped with adhesive plaster applied from one loin to the other. In fat, flabby patients the canvas sling above described would appear to be a useful aid. The replacing in the shrunken abdominal cavity of a large mass of bowel and omentum which has long occupied a hernial sac may be fraught with some risk. Masses of omentum may be removed to facilitate closure. If the hernia is in the lower portion of the abdomen and is not too large, a transverse or oval incision may be made, encircling the thin skin which is thus excised. The repair of the mid-line subumbilical types would necessarily be done by a vertical incision and by suture of the deeper layers. The Mayo method of overlapping the aponeurosis, transversely suturing with fine silk, is an excellent means of repairing the umbilical hernia.

No mention has been made of the hernia following the split rectus muscle incision. Carlucci[11] has shown from an exhaustive analysis of 700 cases of right lower abdominal incision for appendicitis that hernia following split rectus muscle incision is twice as frequent as after the incision and retraction of the rectus muscle. The split rectus muscle incision is now rarely employed at our hospital, and in the present series of patients it was impossible to ascertain whether or not the rectus muscle had been split or retracted at previous operation.

Conclusions.

1. Incisional hernia is more likely to occur in females of middle age and over.

2. Lower mid-line and paramedian incisions are more prone to be followed by herniation, for these reasons: (i) The incision is not anatomically sound from the point of view of easy healing, although it is necessary for access in many cases. (ii) Suturing is difficult and tearing of the peritoneum at the suture line is liable to occur; pressure of the intestine, especially when the Fowler position is employed, is directed to the lower half of the abdomen. (iii) The hernia is a relic of the operation and is due to faulty suture.

3. Oblique incisions of the Kocher type and transverse incisions are less liable to cause hernia.

4. McBurney's muscle-splitting incision, while it is anatomically sound, requires careful suture, and drainage, where necessary, should be judiciously provided. Despite all care, such herniæ will occur owing to infection of tissues. Repair is easy, and the frequent occurrence of hernia after the McBurney incision should not deter the operator from employing this direct approach to the offending appendix.

5. The operation for repair of incisional hernia is not a dangerous one, and patients should be encouraged to have the condition treated surgically, since much discomfort and pain may be avoided and fatal obstruction may otherwise eventually develop. Economically it is unwise to allow a patient in otherwise normal health to be disabled by an incisional hernia.

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THE ANTERIOR PITUITARY GLAND AND CARBOHYDRATE METABOLISM.

By CHARLOTTE M. ANDERSON, M.Sc.

(From the Baker Medical Research Institute, Alfred Hospital, Melbourne.)

OUR earliest knowledge of anterior pituitary function was in relation to sex function and growth, whilst that pertaining to carbohydrate metabolism is of comparatively recent development. Data derived from clinical and *post mortem* observations suggest that the α or acidophile cells of the anterior pituitary gland secrete a principle that influences growth, whilst the β or basophile cells are supposed to secrete a principle that promotes normal development of the ovaries and testes. So far the function of the chromophobe cells is unknown.

In general, laboratory research in relation to carbohydrate metabolism has concerned itself with the study of two types of phenomena, namely, the metabolic disturbances produced by hypophysectomy and those produced by the administration of anterior pituitary extracts.

The Effect of Hypophysectomy on Carbohydrate Metabolism.

The most outstanding facts concerning the effect of hypophysectomy on carbohydrate metabolism are to be found in the publications of Houssay and his collaborators. It is not possible here to review the large number of papers that have appeared, but the chief results and conclusions can be summarized. In brief, Houssay[1] considers that the pituitary gland is responsible for neoglucogenesis, that is, for the formation of carbohydrate from non-carbohydrate sources, such as protein and fat. Before the significance of this hypothesis can be appreciated it is necessary to consider the physiological actions of insulin. These are: (i) the promotion of glycogen storage and glucose oxidation and (ii) the regulation of neoglucogenesis. Thus, when there is a lack of active insulin, as in diabetes, we find that: (i) glycogen storage and glucose oxidation are depressed and (ii) neoglucogenesis is uncontrolled—that is, glucose formation from protein and fat proceeds at an excessively rapid rate. Conversely, in the presence of an excess of insulin we find: (i) acceleration of glycogen storage and glucose oxidation and (ii) inhibition of neoglucogenesis.

In this connexion, Houssay has shown that the wasteful formation of glucose that occurs in an animal from which the pancreas has been removed can be inhibited by removing the pituitary gland. This phenomenon can be understood if we assume with Houssay that the pituitary is a necessary factor for the maintenance of neoglucogenesis.

In agreement with these observations, Houssay has found that hypophysectomized dogs are abnormally sensitive to the hypoglycæmic action of insulin. To explain this we should have to assume that restoration of the blood glucose to its normal level after insulin hypoglycæmia is mainly effected by the pituitary gland accelerating the formation of glucose from protein and fat.

However, it must be remembered that adrenaline is also concerned with the protection of the body against hypoglycæmia. The secretion of adrenaline in response to hypoglycæmia enables liver glycogen to be converted to blood glucose, and thus acts as a compensatory mechanism. This action of adrenaline is of interest in relation to some experiments carried out by Corkill, Marks and White,[2] and later by Cope and Marks.[3] It was found that hypophysectomized rabbits also exhibited a greatly increased sensitivity to insulin. In addition, two other important facts were elicited, namely, (i) that many hypophysectomized rabbits with profound insulin hypoglycæmia were found to have quite large reserves of liver glycogen, and (ii) that the hyperglycæmic action of adrenaline appeared to be decreased in the hypophysectomized rabbit. From this it was argued that one of the functions of the pituitary gland was to "sensitize" liver glycogen to the hydrolytic action of adrenaline. This would afford an explanation of the increased sensitivity to insulin that is seen in hypophysectomized animals. Thus, although adrenaline would be secreted in response to hypoglycæmia, it would not be able readily to convert liver glycogen to glucose. By means of a highly specialized operative technique, Houssay has been able to show that the anterior lobe of the pituitary gland is the part responsible for the phenomena described above.

Effects Produced by the Administration of Anterior Pituitary Extracts.

As a natural corollary to the foregoing it might be thought that excess of anterior pituitary secretion would diminish the hypoglycæmic action of insulin. Many investigators, by using simple saline extracts, have shown that this does occur. The general scheme of such investigations is to study the effect of a small dose of insulin on the blood glucose of a number of rabbits; these are then injected for some days with the pituitary extract and again tested with the same dose of insulin.

Young[4] and Marks[5] have suggested that this "diabetogenic" or contrainsulin principle is associated with the lactogenic hormone of the anterior pituitary. Young prepared an extract according to the method of Riddle, Bates and Dykshorn,[6] and by giving 100 milligrammes in four equal doses over two days he was able to lessen the hypoglycæmic action of insulin.

Most of the experimental data up to the present have been concerned with investigations of the above nature; but no serious attempts have been made to see whether a more fundamental disturbance in carbohydrate metabolism is produced by the administration of anterior pituitary extracts. In order to investigate this I have studied the glycogen metabolism of animals treated with anterior lobe extracts. For this purpose I have taken advantage of the fact, as demonstrated by Goldblatt,[7] that young rabbits, from the same litter and deprived of food for twenty-four hours, have low and remarkably constant values for liver glycogen. In such rabbits the effects of anterior pituitary extracts on various aspects of glycogen metabolism have been investigated.

Methods.

Two types of extract were used: (i) a saline extract and (ii) the "prolactin" fraction. These were prepared as follows.

Preparation of the Saline Extract.

The saline extract was prepared in a manner similar to that used by Cope and Marks. An acetone dried powder, representing a one-in-eight concentrate of the fresh gland, was kindly placed at my

disposal by the Director of the Commonwealth Serum Laboratories. Half a gramme of powder was taken up in eight cubic centimetres of normal saline solution, so that two cubic centimetres of extract would be equivalent to one gramme of fresh gland tissue. The powder was ground in a mortar with the saline for about three-quarters of an hour, then centrifuged, and the supernatant fluid, which was yellow and slightly turbid, was used for injection purposes. This extract was made up each day as required.

Preparation of the Prolactin Fraction.

Young, in his experiments with prolactin, used the method of Riddle, Bates and Dykeshorn for its extraction. When the original description was consulted it was found that the details of the procedure were not at all clear. The method involves the precipitation of the active fraction from an opaque, yellowish extract at definite pH values. Riddle and his co-workers merely state that these pH values were determined colorimetrically and were therefore only approximate values; but I found that, owing to the turbidity and colour of my solutions, it was impossible to obtain any degree of accuracy with indicators over the required range of pH, and, further, that if precipitations were not carried out at the exact pH indicated, then the quantity of precipitate varied considerably. Therefore it was decided to use the hydrogen electrode for all pH determinations.

In this method three insoluble fractions are obtained, the first at pH 11·0, which is 70% to 80% by weight of the original dry powder and contains only slight traces of prolactin. Riddle based his tests for prolactin potency on the crop-gland response of doves. The second fraction, insoluble at pH 8·0, represents, according to Riddle, 7% to 10% of the original powder, but in my extractions it was almost negligible, being about 2% to 3%. This is stated to have some prolactin potency, but actually the third fraction, that is, the one insoluble at pH 5·0 to 5·5 and which in my extraction represented about 10% to 12% of the original powder, contained most of the prolactin fraction.

Blood Sugar Estimations.

The method of Hagedorn and Jensen was used for all blood sugar estimations.

Liver Glycogen Estimations.

For the estimations of liver glycogen a modified Pflüger's method was used, similar to that described by Evans and his co-workers.[8]

Results.

Before I could proceed with investigations on liver glycogen it was essential to know whether I had an active anterior pituitary extract. In order to make certain of this I tested the blood sugar responses to insulin and adrenaline before and after the administration of extract. Incidentally this provided an opportunity to repeat and extend the work of other investigators.

The Effect of Anterior Pituitary Extract on Insulin Hypoglycæmia.

Adult English hutch rabbits, weighing from 1·5 to 2·0 kilograms, were used. As a preliminary the animals' responses to one unit of insulin were plotted out. All the animals were fasted for twenty-four hours before each test. After an interval of seven to ten days anterior lobe extract was administered. The dosage of this varied in different animals, but is stated under the individual experiments. After the animals had been treated with extract the response to the same dose of insulin was again plotted out.

The following experiment was carried out.

Two adult rabbits deprived of food for twenty-four hours were taken, and each received one unit of insulin intravenously. Blood sugar estimations were carried out at intervals of thirty minutes. After an interval of seven to ten days four cubic centimetres of saline extract, equivalent to two grammes of fresh tissue, were administered daily for four days by subcutaneous injection. On the fifth day the responses to insulin were again tested. The results are shown in Table I.

In the first rabbit there is an abolition of the hypoglycæmic reaction, but in the second, following an initial hypoglycæmia, the blood sugar rises more rapidly than in the normal. In view of the fact

TABLE I.
Response to One Unit of Insulin.

Rabbit.	Weight in Grammes.	Before Treatment with Saline Extract of Anterior Pituitary.		After Treatment with Saline Extract of Anterior Pituitary.	
		Time in Minutes after Receiving One Unit of Insulin.	Blood Sugar Percentage.	Time in Minutes after Receiving One Unit of Insulin.	Blood Sugar Percentage.
1	1,500	0	0·099	0	0·108
		30	0·066	30	0·101
		60	0·075	60	0·111
		90	0·068	90	0·117
		120	0·093	120	0·111
		150	0·099	150	0·110
2	1,650	0	0·095	0	0·108
		30	0·056	30	0·068
		60	0·052	60	0·075
		90	0·054	90	0·092
		120	0·059	120	0·092
		150	0·066	150	0·104

that neither of the responses obtained above showed as great a "lessened sensitivity to insulin" as those of Cope and Marks, it was decided either to administer the extract for a longer period or to increase the daily dosage.

Rabbit number 1 was given extract for a further four days, and the response of the blood sugar to one unit of insulin was again determined. The result shown in Table II was obtained.

TABLE II.
Response to One Unit of Insulin of Rabbit 1.

Time in Minutes After Receiving One Unit of Insulin.	Blood Sugar Percentage.
0	0·113
30	0·081
60	0·086
90	0·117
120	0·125
150	0·131

This animal obviously exhibits a lessened sensitivity to insulin.

In another experiment extract was given in doses equivalent to four grammes of fresh gland tissue per day for five days. The effect of this treatment on insulin hypoglycæmia is shown in Table III.

TABLE III.
Blood Sugar Response to Two Units of Insulin of Rabbit 4, Weighing 1,840 Grammes.

Before Treatment with Saline Extract of Anterior Pituitary.		After Treatment with Saline Extract of Anterior Pituitary.	
Time in Minutes after Receiving Two Units of Insulin.	Blood Sugar Percentage.	Time in Minutes after Receiving Two Units of Insulin.	Blood Sugar Percentage.
0	0·092	0	0·111
30	0·057	30	0·096
60	0·063	60	0·077
90	0·077	90	0·095
120	0·079	120	0·108
150	0·084	150	0·129

Thus the increased dose of extract seems to have been more successful than the first dose in decreasing the response to insulin, and for many of the succeeding experiments it was decided to give the animals the equivalent of four grammes of fresh powder per day for five days.

The Effect of the Prolactin Fraction on Insulin Hypoglycæmia.

In the preliminary experiments prolactin was prepared according to the method of Riddle, Bates and Dykshorn. The product, however, was by no means satisfactory, since extremely irregular results, in respect of inhibition of insulin action, were obtained. In view of this, all experiments were for the time being carried out with saline extracts of proven potency.

Later, in a personal communication from Marks, details of a modified method for preparing prolactin were received. This method has yielded an extract that consistently inhibits insulin action, but it must be realized that in the experiments now to be described the results were obtained with the simple saline extract. In a later paper experiments with the prolactin fraction will be described.

The Influence of Anterior Pituitary Extract on Adrenaline Hyperglycæmia.

In the experiments on the influence of anterior pituitary extract on adrenaline hyperglycæmia the procedure was also similar to that described in the first part of this paper. The hyperglycæmic action of a small dose of adrenaline, namely, 0·15 milligramme, was tested on rabbits before and after they had been treated with the saline extract of anterior pituitary.

The following experiment was carried out.

An adult rabbit, weighing 1,600 grammes, and fasting for twenty-four hours, was given 0·15 milligramme of adrenaline (Parke, Davis) subcutaneously. The blood sugar changes are shown in Table IV.

TABLE IV.

Time in Minutes after Receiving 0·15 Milligramme of Adrenaline.	Blood Sugar Percentage.
0	0·106
30	0·120
60	0·141
90	0·145
120	0·148
150	0·146

It will be observed that the dose of adrenaline is so adjusted as to produce only a mild hyperglycæmic response. This rabbit was then given by subcutaneous injection the equivalent of two grammes of fresh gland per day for four days. Table V shows the response to adrenaline on the fifth day.

TABLE V.

Time in Minutes after Receiving 0·15 Milligramme of Adrenaline.	Blood Sugar Percentage.
0	0·081
30	0·132
60	0·138
90	0·159
120	0·159
150	0·155

It will be noted that treatment by saline extract of anterior pituitary has not significantly increased the action of adrenaline; accordingly the injections of extract were continued for a further period of four days and adrenaline was again injected. The result of this test is shown below.

TABLE VI.
Treatment with Saline Extract of Anterior Pituitary for Eight Days.

Time in Minutes after Receiving 0·15 Milligramme of Adrenaline.	Blood Sugar Percentage.
0	0·115
30	0·193
60	0·236
90	0·292
120	0·325
150	0·341

From the results of several further experiments it appeared that considerable variation existed in the responses of different animals to the same dose of anterior pituitary extract. Some animals showed a greatly increased hyperglycæmic reaction to adrenaline after four days' treatment with extract, whilst in others it was necessary to administer the extract for a longer period before any difference was noted.

The Effect of Anterior Pituitary Extract on Glucose Tolerance.

Preliminary experiments were carried out to determine the most suitable dose of glucose for oral administration. Previous workers have administered amounts of five grammes and over, but in my opinion such amounts are too great, since the resultant hyperglycæmia is frequently of a diabetic nature. Such a pronounced response does not provide a suitable basis on which slight differences, due to the administration of extract, might be detected.

The response of a rabbit weighing 1,500 grammes to five grammes of glucose given by stomach tube is shown in Table VII.

TABLE VII.

Time in Minutes after Receiving Five Grammes of Glucose.	Blood Sugar Percentage.
0	0·097
30	0·143
60	0·204
90	0·179
120	0·170
150	0·159

In contrast to Table VII is the response to two grammes of glucose in a rabbit of the same weight (Table VIII).

TABLE VIII.

Time in Minutes after Receiving Two Grammes of Glucose.	Blood Sugar Percentage.
0	0·108
30	0·125
60	0·145
90	0·146
120	0·125
150	0·106

Such a curve closely approximates to that seen in a normal man after the oral administration of 50 grammes of glucose.

Some workers (Baumann and Marine,[9] with rabbits, and Evans,[10] with dogs) found a decreased glucose tolerance in extract-treated animals, but in the following experiments it will be seen that there is no great difference in the glucose tolerance curve before and after treatment. The results shown in Table IX were obtained in a rabbit which had received four cubic centimetres of extract per day for four days.

TABLE IX.

Before Treatment with Extract.		After Treatment with Extract.	
Time in Minutes after Receiving Two Grammes of Glucose.	Blood Sugar Percentage.	Time in Minutes after Receiving Two Grammes of Glucose.	Blood Sugar Percentage.
0	0·095	0	0·108
30	0·155	30	0·170
60	0·179	60	0·148
90	0·168	90	0·125
120	0·152	120	0·117
150	0·120	150	0·108

In the next experiment the rabbit received injections for eight days and, although there was an unaccountable drop in the fasting blood sugar, the glucose tolerance curve showed no change.

TABLE X.

Before Treatment with Extract.		After Treatment with Extract.	
Time in Minutes after Receiving Two Grammes of Glucose.	Blood Sugar Percentage.	Time in Minutes after Receiving Two Grammes of Glucose.	Blood Sugar Percentage.
0	0·092	0	0·061
30	0·125	30	0·108
60	0·161	60	0·136
90	0·148	90	0·145
120	0·127	120	0·095
150	0·104	150	0·084

The Influence of Anterior Pituitary Extract on Liver Glycogen.

Much of the work on liver glycogen in extract-treated animals has been carried out with adult rabbits and dogs, from which no constant figures for the normal fasting liver glycogen percentage can be obtained. For reasons previously given I have used young rabbits from the same litter and deprived of food for twenty-four hours. Goldblatt and Corkill[11] have shown that in such animals a deposition of liver glycogen occurs after the injection of from 0·5 to 1·0 unit of insulin.

In addition, it has been shown that the intravenous injection of Na dl-lactate causes a deposition of liver glycogen in these young rabbits. Accordingly I thought it worth while to see whether the deposition of liver glycogen that occurs after the administration of insulin or Na dl-lactate was in any way impaired in animals treated with anterior pituitary extract.

First, an extract from a pituitary powder of known potency was prepared and tested in respect of its contrainsulin effect on young rabbits. The extract prepared caused a definite resistance in adult animals, but it was impossible to produce this effect in a large number of young rabbits. The results shown in Table XI will illustrate a typical experiment.

These results were very puzzling, particularly as I felt certain that I was dealing with an active extract. However, in spite of the negative findings in respect of insulin action, I decided to see whether there was any effect on the deposition of liver glycogen.

TABLE XI.

Showing Observation on Rabbit Eight Weeks Old, Weighing 600 Grammes and Fasting for 24 Hours.

Before Treatment with Anterior Pituitary Extract.		After Treatment with Anterior Pituitary Extract.			
Time in Minutes after Receiving One Unit of Insulin.	Blood Sugar Percentage.	Duration of Treatment in Days.	Daily Dose of Extract (Equivalent to Grammes of Fresh Tissue).	Time in Minutes after Receiving One Unit of Insulin.	Blood Sugar Percentage.
0	0·108	5	3	0	0·104
30	0·084			30	0·056
60	0·039			60	0·047
90[1]	0·036			90	0·039
120	0·036			120	Convulsions
150	0·040				

[1] Pre-convulsive symptoms (incoordination and flaccidity).

The following experiment was performed.

Four young rabbits from the same litter were taken. Two (numbers 2 and 3) received daily injections of a saline extract for five days. Each injection corresponded to four grammes of fresh tissue. At the end of the fourth day food was withheld from all animals for twenty-four hours. At the end of this period the rabbits were treated as follows. Rabbit number 1 was used as a normal fasting control for liver glycogen estimations; rabbit number 2 was used as a fasting control, treated with anterior pituitary extract; rabbit number 3, fasting, was treated with anterior pituitary extract and was given insulin; rabbit number 4 was a normal fasting animal which was given insulin.

After the administration of insulin, blood sugar was estimated every thirty minutes for two and a half hours, at the end of which time all four animals were killed and the livers were worked up for glycogen estimation.

The results of this experiment are shown in Table XII.

I was extremely surprised at the results of this experiment, since it appeared that the seemingly inactive extract, as judged from its effect on the hypoglycæmic action of insulin, had greatly inhibited the effect of this hormone in promoting glycogen storage. Thus the normal animal showed a value for liver glycogen of 1·66%, whereas number 3 had only 0·7%.

The results of this experiment were confirmed in several others, and the combined results are shown in Table XIII.

Thus when anterior pituitary extract is administered there appears to be some definite alteration in the normal mechanism by means of which glycogen is laid down in the liver.

The Influence of Anterior Pituitary Extract on Glycogen Formation from Lactate.

It has been shown by Hodgson[12] that young rabbits readily form glycogen after the intravenous injection of Na dl-lactate.

Na dl-lactate was prepared by neutralizing syrupy lactic acid with a saturated solution of sodium carbonate. The strength of the resultant solution was estimated in terms of lactic acid. The solution was then diluted so that one cubic centimetre was equivalent to 0·25 gramme of lactic acid. Four cubic centimetres of this solution were diluted to six cubic centimetres with water and were used for injections, so that each rabbit received the equivalent of one gramme of lactic acid.

The technique of the experiment is similar to that described for the former investigation. Three young rabbits from the same litter were taken, and one was given anterior pituitary injections as before. At the end of four days the three rabbits were placed in a cage and kept without food for twenty-four hours, after which two of them, one normal and one extract-treated, received injections of sodium lactate. The injections were given into the marginal ear vein and were timed to take ten minutes each. It was found that if the lactate was injected too quickly the animal might collapse and die. Liver samples for glycogen estimation were taken two hours after the administration of lactate, and the rabbit serving as a normal fasting control was killed at the same time. The results of four such experiments are given in Table XIV.

In no instance does the glycogen deposition in the animals treated with extract approximate that

TABLE XII.

Rabbit Number.	Remarks.	Weight in Grammes.	Time in Minutes after Receiving One Unit of Insulin.	Blood Sugar Percentage.	Liver Glycogen Percentage.
1	Normal control, fasting twenty-four hours	730	—	—	0·2
2	Treated with extract; fasting twenty-four hours	620	—	—	0·08
3	Treated with extract; fasting twenty-four hours	730	0 30 60 90 120 150	0·104 0·070 0·056 0·059 0·063 0·062	0·7
4	Normal rabbit, fasting twenty-four hours	715	0 30 60 90 120 150	0·097 0·070 0·056 0·063 0·065 0·068	1·66

TABLE XIII.

Description of Rabbits.	Litter Number.	Weight in Grammes.	Units of Insulin Given.	Liver Glycogen Percentage.	Average Liver Glycogen Percentage.
Controls	1	730	—	0·2	0·59
	2	475	—	0·77	
	3	600	—	0·55	
	4	730	—	0·84	
Controls treated with anterior pituitary extract	1	620	—	0·08	0·16
	2	350	—	0·3	
	3	795	—	0·10	
	4	610	—	0·18	
Normal control given insulin	1	715	1	1·66	1·6
	2	410	1	2·4	
	3	770	1	0·95	
	4	710	1	1·5	
Treated with anterior pituitary extract and given insulin	1	730	1	0·7	0·37
	2	390	1	0·5	
	3	690	1	0·14	
	4	560	1	0·15	

TABLE XIV.

Description of Rabbit.	Litter Number.	Weight in Grammes.	Amount of Sodium Lactate. (Grammes.)	Liver Glycogen Percentage.	Average Liver Glycogen Percentage.
Fasting control	1	650	—	0·24	0·50
	2	1,050	—	0·70	
	3	725	—	0·47	
	4	680	—	0·59	
Untreated, given sodium lactate	1	810	1	2·2	1·61
	2	870	1	1·06	
	3	970	1	1·31	
	4	510	1	1·9	
Treated with anterior pituitary extract, given sodium lactate	1	900	1	0·64	0·33
	2	820	1	0·33	
	3	980	1	0·32	
	4	390	1	0·04	

found in the untreated ones. In some animals, which received both pituitary extract and Na dl-lactate, the observed values for liver glycogen were actually lower than those found in normal fasting controls.

It seemed necessary to ascertain whether the inhibition of glycogen formation from lactate was a specific effect of anterior pituitary extract. To test this, extracts were prepared from acetone dried powders of liver, brain and muscle tissues. The preparation and dosage of such extracts followed that described for the pituitary extract. The influence of these extracts on glycogen formation is shown in Table XV, which contains the combined results of several experiments.

It is seen that the rabbit (number 10) treated with anterior pituitary extract is the only one in which glycogen formation from lactate is inhibited. This result was confirmed in several similar experiments, so that the effect of pituitary extract appears to be a specific one.

It was also necessary to show that the administration of pituitary extract had not impaired the function of the liver, in that its power or forming glycogen from glucose was lost. If such was the case, the failure to form glycogen from lactate would lose its significance. In Table XVI it is shown that the administration of extract does not prevent glycogen being formed from glucose.

Discussion.

The most interesting facts elicited by the experiments described in this investigation are those in relation to the effect of anterior pituitary extract on liver glycogen formation. It is seen that administration of pituitary extract inhibits the normal mechanisms by means of which glycogen is deposited in the liver of young rabbits receiving either insulin or Na dl-lactate. In view of the fact that the young rabbits in which glycogen deposition did not occur exhibited no resistance to insulin, it might be argued that the extract used was inactive in respect of "diabetogenic" principle. It does not appear that this was the case, since samples of extract from the same batch were shown to inhibit the hypoglycæmic action of insulin in adult rabbits.

However, if we disregard for the moment any discussion on the contrainsulin potency of the

TABLE XV.

Description of Rabbit.	Number.	Weight in Grammes.	Liver Glycogen Percentage.	Average Liver Glycogen Percentage.
Normal, untreated, fasting controls	1	740	0·98	0·98
	2	530	1·20	
	3	550	0·75	
	4	555	1·0	
Fasting twenty-four hours, given one gramme of Na dl-lactate intravenously, killed two hours later	5	620	1·63	2·16
	6	590	2·70	
Treated with liver extract, fasting twenty-four hours, given one gramme of Na dl-lactate intravenously, killed two hours later	7	740	1·78	1·79
Treated with brain extract, fasting twenty-four hours, given one gramme of Na dl-lactate intravenously, killed two hours later	8	710	2·10	
Treated with muscle extract, fasting twenty-four hours, given one gramme of Na dl-lactate intravenously, killed two hours later	9	530	1·50	
Treated with anterior pituitary extract, fasting twenty-four hours, given one gramme of Na dl-lactate intravenously, killed two hours later	10	420	0·69	

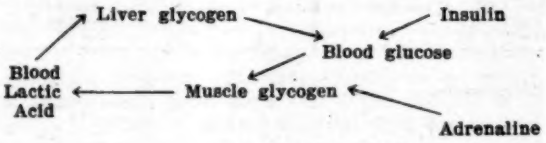
TABLE XVI.

The Effect of Anterior Pituitary Extract on Liver Glycogen Formation from Lactate and Glucose.

Rabbit Number.	Remarks.	Weight in Grammes.	Liver Glycogen Percentage.
1	Normal fasting controls	307	0·88
2		550	1·00
3	Fasting twenty-four hours, received one gramme of Na dl-lactate intravenously. Killed two hours later.	400	2·10
4		590	2·70
5	Treated with anterior pituitary extract for five days. Fasting twenty-four hours, received one gramme of Na dl-lactate intravenously. Killed two hours later.	360	0·39
6		420	0·69
7	Fasting twenty-four hours, received 1·5 grammes of glucose by mouth. Killed two hours later.	438	3·0
8		365	3·3
9	Treated with anterior pituitary extract and deprived of food for twenty-four hours. Given 1·5 grammes of glucose by mouth. Killed two hours later.	560	1·8
10		635	2·6

extracts used, the fact remains that such extracts exercise a profound influence on carbohydrate metabolism. Furthermore, this appears to be a specific effect of the anterior pituitary, since extracts prepared from other tissues were quite inactive. At the moment it is quite useless to speculate as to what hormonal fraction of the anterior pituitary is responsible; but in a later paper the effects produced by an active prolactin preparation will be reported, and it will be seen that the same inhibition of glycogen formation is present.

The fact that neither insulin nor lactate can promote glycogen formation in young rabbits treated with anterior pituitary extract suggests that some factor present in the extract has in some manner interrupted a stage in the Cori cycle, namely:



Conclusions.

So far we have no conclusive evidence as to the effect of anterior pituitary extract on the actions of insulin and adrenaline in connexion with muscle glycogen.

The facts as recorded indicate that the anterior pituitary has a controlling influence in glycogen metabolism.

Acknowledgements.

My sincere thanks are due to Dr. A. B. Corkill for suggesting these investigations and for his guidance throughout the course of the work, and to Mr. A. F. Doutch for much valuable technical assistance.

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Reports of Cases.

AN UNUSUAL RESULT OF HEAD INJURY.

By W. SPALDING LAURIE, M.D., B.S.,
Melbourne.

MENTAL changes frequently follow head injuries. It is not so generally recognized that these mental changes may indicate pathological lesions in the brain that can be localized and may explain the mental symptoms, the necessity for reference to an alienist and an asylum thus being obviated. The following is a case in point.

X., aged sixty-four years, was knocked down by a motor vehicle. He was removed to a public hospital, where he was found to be suffering from cuts on his forehead and abrasions of his face and knees, and concussion. There was no evidence of fracture. After a few hours he was allowed to leave and was admitted to a private hospital under my care. I found that he had extensive bruising and abrasions of his limbs, and stellate splitting of the skin over his forehead. In about a week he was able to resume work.

Some six months later it was noticed that he was having frequent headaches, was worrying, apparently unduly, about a recently healed fistula that followed a kidney operation performed four years previously, and that he declined to drive his motor car; when others tried to drive for him, it was noticed that he was afraid of all oncoming traffic. He became irritable, with constant headache and insomnia. He consulted the surgeon who had previously operated upon him and was referred by him to an alienist, who, after keeping him for a month in hospital, sent him home, observing to his wife that she would soon have to place him in an asylum.

The patient then came under my care again. I found him mentally dull, with some mild sexual delusions and great despondency. His hearing was good, but he complained of gradual failure of eyesight; and on examination he showed slight transient nystagmus on extreme deviation. His right optic disk seemed slightly pale. He had a coarse tremor of his hands, but no ataxia; every movement made voluntarily, however, was extremely slow and deliberate. He had a staggering gait, and he had to keep his eyes firmly fixed upon his feet to prevent stumbling. He could stand with his eyes shut with very little reeling. His reflexes, both tendon and skin, were normal. His sensation seemed unimpaired.

It was obvious that he was suffering from a lesion of the frontal lobes, apparently bilateral and probably following his concussion. I referred him to Dr. Leonard Cox for further investigation. He took the patient into hospital and reported that ventriculography revealed extreme dilatation of the ventricles and atrophy of the frontal cortex. There was no sign of any obstruction to the circulation of cerebro-spinal fluid.

This report at once suggested the condition noted among boxers, and described both clinically and at autopsy, which leads through a series of concussions from hammering of the head to atrophy of the cortical cells, mainly of the frontal lobes, and to secondary dilatation of the ventricles. The frequent recurrence of the condition known as "punch drunk" ends ultimately in the chronic condition, in which the boxer develops a sluggishness of reaction and a loss of power in his punch, which end in a final, often fatal, knock-out. His friends will often have noticed months previously that he is failing in mental calibre, and boxing circles have designated the condition of the boxer by the term "plug-nutty" and other similar names.

It must be exceedingly rare for a patient to show this condition after a single concussion following an accident, and such an occurrence may very well prove of special interest from a medico-legal point of view.

Reviews.

HYGIENE.

MAKING due allowance for its having been written primarily for medical students and practitioners in Britain, the Australian part-time medical officer of health will find Professor Joseph Bigger's "Handbook of Hygiene" a useful little addition to his shelves.[1]

It is a miniature text-book, well indexed, clearly printed, and the arrangement of the chapters is novel and somewhat more logical than that usually adopted. The illustrations are few and of no great importance. Tables of standards of heights and weights *et cetera* are not applicable to the population of this country, and the section on small sewage installations is misleading to the Australian student or practitioner. The standard of personal cleanliness advocated in the section on baths and bathing is very modest; it is disappointing to find a weekly bath being put forward as an ideal in a modern hand-book on hygiene, even for the inhabitants of the northern hemisphere. However, allowing for these minor defects, the book generally is a useful one. The chapter on "The Assessment of Normal Health" is an excellent innovation. A rather ominous sign of the times is the amount of space given to the consideration of the effects of gases used in warfare, in the chapter on poisonous gases.

AN INTRODUCTION TO THE NEUROSES.

ALTHOUGH Dr. T. A. Ross admits that there is little that is new in the second edition of his book, "The Common Neuroses", it still remains a very useful work, which should prove of particular value to the busy general practitioner who must read as he runs.[2]

In a short space it deals with many aspects of its subject, including the various theories of ætiology, dreams, unconscious mental processes, investigation and treatment. With regard to the last, the author gives some sound advice in suggesting that the patient should always be told the exact nature of the complaint in mental or physical disorders; and he points out that in the former an explanation of the mechanism in itself often results in cure, as the symptoms are merely the means of attaining an end which it is the physician's object to determine. This is a somewhat optimistic attitude which is not entirely justified by the results obtained. It makes no allowance for two important factors which must be considered, namely, environment and an inherent predisposition to the development of a neurosis.

The author wisely remarks that no one psychotherapeutic method can be applied satisfactorily in all cases and suggests the judicious use of the technique appropriate to the individual case. In this connexion he states that the psychoanalysts are "apt to spend many fruitless hours digging complexes out of the unconscious which have often no bearing on the case, when their time might have been more profitably employed in readjusting obvious anxieties—which they held to be of no moment because they had not been repressed". This is a statement with

[1] "Handbook of Hygiene for Students and Practitioners of Medicine", by J. W. Bigger, M.D., Sc.D., F.R.C.P.I., D.P.H., M.R.I.A.; 1937. London: Baillière, Tindall and Cox. Demy 8vo, pp. 418, with illustrations. Price: 10s. 6d. net.

[2] "The Common Neuroses, their Treatment by Psychotherapy: An Introduction to Psychological Treatment for Students and Practitioners", by T. A. Ross, M.D., F.R.C.P.; Second Edition; 1937. London: Edward Arnold and Company. Demy 8vo, pp. 248. Price: 10s. 6d. net.

which most psychiatrists will heartily agree. He also draws attention to the neglect which the work of Dejerine has suffered because he was lost sight of in the *furor* which heralded the advent of the Freudian doctrine.

It is only with the author's classification of the neuroses that we can find any fault. In an attempt to simplify this he tends to overlook the essential difference in the emotional reactions of neurasthenia and the anxiety state, and so groups them both under the heading of "the anxiety reaction". On the question of the differential diagnosis, however, he excels. Hysteria, traumatic neuroses and the compulsion and obsessional neuroses are dealt with in some detail. He notes, as many another worker in this field has noted, that the last are very unsatisfactory in their response to treatment.

This book can be regarded as a simple and straightforward attempt to explain the mechanism of the neuroses and to suggest appropriate methods of approach and treatment. As such it entirely and satisfactorily serves its purpose. It is modestly described as "An Introduction to Psychological Treatment", but it is much more than that, and should prove of greater value to those for whom it is intended than many books several times its size on similar subjects.

A TEXT-BOOK ON OBSTETRICS.

THE seventh edition of "Williams Obstetrics" has been published.[1] Dr. Williams died on October 21, 1931, a year after he had completed the thoroughly revised sixth edition of his text-book. The present edition has been revised by Henricus J. Stander, Professor of Obstetrics and Gynæcology, Cornell University Medical College, who has made many contributions to obstetric literature. In the preface Stander writes: "It seemed a most difficult, if not impossible, task for anyone undertaking the work of revision to do full justice to Williams and maintain the standard set by him." We congratulate the author on the success of his effort.

Although the present edition has been completely revised and some sections have been rewritten, the general plan of the book has in the main been unchanged; the order of the contents has been altered. Three new chapters have been added, and these add to the value of the book. One of these deals with the hormones as related to pregnancy and the puerperium, and gives a clear and concise account of the present state of knowledge of this important subject. The second chapter deals with urinary complications, particularly pyelitis. This is such a common complication that greater attention should be paid to it in text-books. A good description is given of the modern ideas of this disease as it occurs in pregnant women. The treatment of pyelitis by the administration of eserine sulphate, advocated by the late S. Harry Harris, which so often yields such excellent results and which in many cases saves the need of ureteral catheterization, seems quite unknown to American writers and is not mentioned.

The third new chapter is on amnesia, analgesia and anæsthesia in labour. The author describes many methods and agents in vogue or now out of vogue. Among those discussed are scopolamine-morphine analgesia, heroin, Gwathmey's synergistic analgesia, barbituric acid derivatives, paraldehyde and "Avertin", pentobarbital sodium ("Nembutal"), pentobarbital and paraldehyde, pentobarbital and ether oil, pentobarbital and scopolamine, chloroform, ether, nitrous oxide and gas analgesia, local anæsthesia, lumbar anæsthesia, sacral block anæsthesia, hypnotism. The most widely used agent seems to be pentobarbital sodium, and this seems to be the most satisfactory. The author does not advocate "Avertin", feeling that it is not entirely innocuous. A summary of the author's views is given at the end of the chapter, with a description of the technique he uses. He studies his patients carefully beforehand, and in a relatively small and carefully selected group of patients, who need alleviation of pain during the early periods of labour, he uses "Nembutal" and scopolamine or morphine and scopolamine. Nitrous oxide and oxygen analgesia is used largely in the second stage, and at the time of delivery ether in addition is often used. The author states that no single method is entirely satisfactory for the alleviation of pain during labour, nor is there any one type of anæsthesia that can be used universally at the time of labour.

Certain other sections, namely, those on placental infarcts, puerperal infection and toxæmia have been almost rewritten. It is impossible in a book of this size to mention all the alterations in detail. The book has been made slightly larger. It is profusely illustrated and, as usual, beautifully printed.

"Williams Obstetrics" has long been recognized as one of the soundest text-books on obstetrics in the English language. The present edition admirably maintains the former standard, and can be recommended to all who practise, and who wish to have an accurate and comprehensive account of, the art and science of modern obstetrics.

[1] "Williams Obstetrics: A Textbook for the Use of Students and Practitioners", by J. W. Williams, revised by H. J. Stander, M.D., F.A.C.S.; Seventh Edition; 1936. New York: D. Appleton-Century Company Incorporated; Australia: The Blyth Publishing Company Limited. Royal 8vo, pp. 1275, with illustrations. Price: 56s. net.

PSYCHIATRY FOR SOCIAL SCIENCE STUDENTS.

IN "Clinical Psychiatry", which is intended for students of social sciences including law as well as for students of medicine, Dr. M. Braude has aimed at a simple and practical presentation of psychiatry.[1]

After an historical survey, which is so brief that it might well have been omitted, the author gives a general description of outstanding symptoms which more commonly call for examination, and offers useful advice as to interrogation of the patient.

In the chapters on the different syndromes one might question the advisability of introducing the student first of all to perhaps the least understandable of all the psychoses, *dementia præcox*. We are glad to see some advice given as to prophylaxis in the way of correction of morbidly introvert and autistic habits. Various methods of treatment, including insulin shock, are mentioned, but both here and elsewhere in the book, for example in regard to malarial therapy and inductothermy, the student will find no information concerning actual technique.

Like many other authors, Dr. Braude prefers to describe confusional states as complications of various physical disorders, and finds no place for confusional insanity as a separate entity.

Some eighty pages are devoted to the psychoneuroses or maladjustment neuroses, and simulation is given a chapter to itself. This is commensurate with the frequency and importance of these conditions in ordinary and especially in industrial practice.

As regards mental deficiency, the author is content with a general description and wastes no space on pathology, which, however interesting, becomes a very minor issue in the handling of those milder grades which come under notice in social or educational misfits.

The final chapter is devoted to Freudian therapy and practice.

The book is agreeably free from statistics, which offer information of such doubtful value in other works dealing with this specialty. There is a bibliography of recent work at the end of every chapter. There is, however, one serious omission, especially as the author has commended the work to law students, and that is reference to such medico-legal aspects as responsibility and testamentary capacity. The latter indeed is mentioned and dismissed in a couple of lines. The modern text-book on psychiatry is surely incomplete without some discussion of the nervous disorders of childhood. In other respects the book fulfils fairly well the purpose for which it has been written.

[1] "The Principles and Practice of Clinical Psychiatry", by M. Braude, M.D.; 1937. Philadelphia: P. Blakiston's Son and Company, Incorporated. Large crown 8vo, pp. 392. Price: $4.00 net.

The Medical Journal of Australia

SATURDAY, JANUARY 1, 1938.

All articles submitted for publication in this journal should be typed with double or treble spacing. Carbon copies should not be sent. Authors are requested to avoid the use of abbreviations and not to underline either words or phrases.

References to articles and books should be carefully checked. In a reference the following information should be given without abbreviation: Initials of author, surname of author, full title of article, name of journal, volume, full date (month, day and year), number of the first page of the article. If a reference is made to an abstract of a paper, the name of the original journal, together with that of the journal in which the abstract has appeared, should be given with full date in each instance.

Authors who are not accustomed to preparing drawings or photographic prints for reproduction, are invited to seek the advice of the Editor.

HOSPITAL PRACTICE IN BRISBANE.

In many communities it is now recognized that the honorary system of staffing hospitals has had its day and that some other method must be found. The State has assumed and is assuming more and more responsibility in the care of the sick; hospitals have become complex but efficient units in which every form of specialist treatment can be obtained, and hospital doors have in many places been thrown open to all and sundry, regardless of their ability to pay for the treatment freely given to them by the honorary members of the staff. Those who hold that the honorary system should be superseded by another method have some justification for their opinions.

Hospital practice in Queensland under the honorary system has for years been becoming more difficult. It was not simplified by the passage of *The Hospitals Act* of 1936, according to which hospital boards were charged with the treatment of the sick. (This measure was discussed in the issue of January 2, 1937.) As the President of the Queensland Branch of the British Medical Association points out in his address published in this issue, the State of Queensland is striving for an institutional type of medical service. This is reflected in the enormous growth of the Brisbane Hospital and in the crowds of patients who seek treatment within its walls. We do not propose to discuss the merits or demerits of institutional service; rather would we keep readers informed of recent developments in Brisbane and draw attention to some factors that need to be considered in connexion with them.

In January of last year a deputation from the honorary staff of the Brisbane Hospital waited on the Brisbane and South Coast Hospitals Board and urged the reorganization of the medical services within the hospital, at the same time offering its cooperation in any attempt at reorganization. The staff pointed out to the board that the development of hospital services in all parts of the world and their extensive use by the public had made an anachronism of honorary service by a medical staff. It was also stated that, though the population of Brisbane had increased in ten years by only 17%, out-patient attendances at the Brisbane Hospital had increased by 212% and admissions to the wards by 84%. The members of the staff also drew attention to disabilities under which they laboured. There was no immediate outcome from the meeting between the staff and the board, but discussions took place between the two bodies after an interval of some months. No decision was made, but early in December a conference was held between the Minister for Health, Mr. E. M. Hanlon, officers of his department, a subcommittee of the Brisbane and South Coast Hospitals Board and representatives of the honorary staff of the Brisbane Hospital. At this conference a full and frank discussion took place, and it was decided that certain recommendations should be made to the Brisbane and South Coast Hospitals Board. The recommendations, which are copied from the *Courier-Mail* of December 8, 1937, were as follows:

That a medical director of the Brisbane Hospital be appointed at a salary commensurate with the importance and responsibility of that position.

That the hospital should be departmentalized, with a first-class controlling officer in charge of each department.

That a staff of not less than 45 part-time officers be appointed, at salaries based on the duties performed.

That consideration in the appointments be given to members of the present honorary staff in view of their past services to the board.

That the requisite subordinate resident staff be appointed.

That all appointments to the staff which involve teaching duties be made by representatives of the hospitals board and the university, acting in conjunction.

That in view of the approaching entry of medical students to the hospital the matter be treated as urgent.

That the board proceed as soon as possible to establish the necessary out-patients' clinics to prevent congestion at the hospital.

Both the Department of Health and the medical profession have to realize that if the recommendations of the conference are adopted, the scheme will be successful only if certain requirements are met. In the first place the medical director of the hospital will need to be a man with wide experience in administration; he should not busy himself with the treatment of individual patients. He should endeavour by wisdom and tact to make the complicated machinery of the institution run smoothly; to this end, though the hospital is "departmentalized", he must be given a free hand and not be hampered by departmental interference. The full time heads of departments should have clinical experience at least equal to that of the part-time visiting officers. Such practitioners who are willing to accept these positions may not be easy to find; they will need to be well paid and should be given some security of tenure. The number of part-time officers, forty-five, will be smaller than that of the honorary staff. Under the old system the out-patient departments were so overcrowded that it was impossible for the honorary officers to give adequate time and attention to each patient. Under the new system considerable reorganization will be necessary if adequate treatment is to be given. The medical officers who receive payment for their erstwhile honorary work will doubtless be just as careful and painstaking under the new as they were under the old *régime*; if they fail, they will have no cause for complaint if they are relieved of their duties. The staff of the Brisbane Hospital has had several of its suggestions accepted; it is satisfactory that past services in an honorary capacity will be considered when appointments are made to the part-time paid staff; and everyone will agree in the wisdom of the arrangement that all appointments to the staff which involve teaching are to be made by representatives of the board and the university, acting together.

The proposed arrangements for staffing the Brisbane Hospital are new to Australia. Though the recommendations of the conference are not all that we should have desired, we hope that an effort will be made by all concerned to provide an adequate hospital service for the people of Brisbane. The adoption of the payment of visiting medical officers to hospitals and even the "departmentalization" of the Brisbane Hospital do not eliminate all hope of securing the adoption by the Government of Queensland of the scheme of medical service that is the aim of the Queensland Branch of the British Medical Association. The members of the medical profession in Queensland have at length gained the ear of the Minister and had conference with him. If by faithful service in the Brisbane Hospital under the new arrangements they can convince him of their sincerity of purpose and of their concern for the public welfare, they may yet persuade him to disregard unsound advice and may bring him to believe that a medical service for the community based on the work of the general practitioner is the only service which will give lasting satisfaction in an Australian democracy.

Current Comment.

THE SCIENCE OF LIGHTING.

To place lighting on a scientific basis its accurate measurement is essential. Although during the past twenty years accurate information has accrued, it is pointed out by Stuart Ramsey that progress in the science of lighting became more rapid with the advent of a convenient and reasonably accurate photometer in 1931.[1] Ramsey states that the problem has resolved itself into answers to the following questions: "What is the proper intensity, quality and distribution of light for the best perception of the work in hand and for the maximum of eye comfort?" "What is the best for continued eye-health and for the least bodily fatigue?" Intensity of lighting merely for visibility varies widely. The eye has developed under daylight conditions which range from several hundred to about 10,000 foot-candles, but it can do moderately fine work, such as reading, under half a foot-candle. Even persons with healthy eyes complain when work is performed with lighting which approximates the lower threshold of visibility. The necessary forcing

[1] *The Canadian Medical Association Journal*, September, 1937.

of accommodation and convergence, with pupillary contraction, in addition to evoking eye strain, eventually gives rise to deformity and disease of the eye. On a shaded veranda on a fine day the light is about 500 foot-candles and man can read in comfort. In many reading rooms the healthy eye manages when the light is not more than three foot-candles. The best work, however, is not done at this intensity. Between certain intensities of illumination quickness and accuracy of work increase with increase of light. It was found that at 20 foot-candles the output in typesetting attained its maximum. In sorting mail under different illuminations it was found that, as the light was increased from two and a quarter foot-candles to nine, the output of mail sorted per man per hour increased from 28 to 33 pounds. It has been demonstrated in different factories that increasing the usual fair lighting effects a considerable increase of output. Eliminating glare and sharp shadows also helps. In school classes it has been found that increase in illumination raises the marks obtained by the scholars. Ramsey found that when children whose efficiency was increased with better illumination changed rooms with scholars of the same grade who were not displaying the same efficiency, the scholastic achievements were reversed. Exact experimentation, with the employment of ingenious apparatus, has demonstrated that, from a fraction of a candle-power to five candle-power, the increase of acuity is rapid. It is much slower between five and ten. Above ten it increases very slowly, and above twenty it is practically stationary. For reading good book print by normal eyes the intensity is about six foot-candles. For ordinary newspaper type it is about thirteen. Old eyes need greater intensities. Estimating by the size of the pupils alone, it would seem that a person of eighty years requires four times the illumination that suffices for one of twenty-five.

Ramsey reminds us that for comfortable reading, as well as intensity of light, quality of light and quality of lighting must be considered. Regarding quality of light, it must be noted that the nearer its spectrum approaches that of daylight, the more satisfactory it will be. The quality of lighting includes brightness and the distribution of brightness contrast. Such brightness concerns not only the source of light, but also the brightness of the object observed, as well as the brightness contrast between things to be observed and their background. Ramsey points out that in reading we are concerned with relatively white paper and relatively black ink. The contrast, however, is not constant. The average book paper reflects about 80% of the incident light, while the paper of the average telephone directory reflects only 57%. The print in the telephone book also has a different absorptive percentage and is generally of a different size. The result of all the factors is that about three times the illumination is needed to display the details of a telephone directory with distinctness equal to those of a well-printed book. Experience with the telephone directories in Australia amply substantiates this contention. Ramsey goes on to state that intensity of illumination, brightness of the object itself or its background and contrast are all interwoven. It is impossible to see without illumination, nor can the human eye see much without brightness and contrast. But there must not be too great a brightness contrast between the work and the surrounding room. Tests made on tasks when the eyes often looked up from the work to other objects in the room showed that 12% more work could be accomplished when there was no brightness contrast between the task and the rest of the room as when the contrast was one hundred to one. Very little difference was found when the brightness contrast was as ten to one. Ramsey states that this interference with rapid vision is due to the varying size of the pupil and the necessity for repeated retinal readaptation. When the general brightness was greater than the brightness of the printed page, the rate of work was slowed. Ramsey's explanation is that relatively higher stimulation of the rods and cones in the periphery of the retina depresses the activity of the cones in the fovea. Probably also some glare is produced. Glare is an obnoxious feature and may be simple or veiling. Simple glare is too great brightness in any part of the visual field. Veiling glare concerns the central field of vision and is an obscuring of the vision on the retina produced by an overlay of scattered light or by unfocused light reflected from the work surface. In one of the largest newspaper offices in Australia it was found that when, on the advice of an ophthalmic surgeon, green blotting paper was substituted for white, the sub-editors and readers found their work much easier and that the output of work was greater. Ramsey considers it to be established that work in semi-darkness determines miner's nystagmus. He also states that more cases of myopia apparently come from old poorly lighted than from well-lighted modern offices. But he adds that such factors as ventilation, age and type of work complicate the conclusions.

Ramsey arrives at the following conclusions. Light for reading ordinary print should be about ten foot-candles; for poor print or print on paper that is not a good white twenty foot-candles should be employed. The light should be diffused. If a diffused light is not available, the intensity should be lower (about six foot-candles) to avoid glare. There should be supplementary lighting of the central field to make it greater than the peripheral illumination. No bare lights should be visible in the peripheral field. More light is needed by old or poor eyes. Of course different tasks need different intensities of light.

Ramsey's contribution is of such importance and value that it should be read in its entirety. It will be useful in various fields of industry. Even to digress for a moment to the field of sport: what a boon a portable photometer would be on the cricket field when an appeal was made against the light! The matter would be mathematically decided.

Abstracts from Current Medical Literature.

BACTERIOLOGY AND IMMUNOLOGY.

Biopsy of Sternal Marrow.

G. LOIS WELLER (*Journal of Laboratory and Clinical Medicine*, April, 1937) has described a method of obtaining sternal marrow by the use of a spinal needle. The technique used was preceded by the local infiltration, with a 4% "Novocain" solution, of the angle of Louis, which had previously been cleansed with iodine and alcohol. A number 18 gauge spinal needle was then inserted down to the periosteum, with the stylet in place and with the point directed towards the patient's head, at an angle of about 30° from the horizontal. When the marrow cavity was entered there was a certain amount of "give"; then the stylet was withdrawn and the needle was pushed on for a further 0·5 to 1·0 centimetre. With the stylet still withdrawn, the needle was withdrawn slowly and evenly. Then, while the bevel of the needle was held parallel to the surface of a glass slide and the stylet was being gradually replaced, the needle was rubbed back and forth over an area of about three-fourths of an inch square. The films thus obtained were then fixed, either in the air or in methyl alcohol. The author considers that the risk of obtaining smears from a normal portion in the presence of a patchy lesion is small when the advantage of the repetition of the manœuvre is considered, as he claims that it can be repeated not only frequently, but over a long time.

Invasiveness of Streptococci.

M. G. PRADHAN (*The British Journal of Experimental Pathology*, April, 1937) has investigated factors determining invasiveness of a strain of hæmolytic streptococci. The cultures were isolated from an epidemic of mouse septicæmia, belonged to Lancefield's Group C, and had three variants, a normal, a mucoid and an "O" form. All variants showed the same virulence for mice, failed to develop soluble toxin, and appeared to possess no fibrinolytic power for mouse fibrin. A line of investigation of the spreading factor was suggested by the finding of Duran Reynals that certain tissue extracts, when inoculated together with particulate matter, could increase the spread of particles in the skin, and because this finding led to the conclusion that "the power to invade the host's tissues depends upon the presence in the organism of some factor capable of increasing tissue permeability". Trypan blue, 1%, was used to give an indication of spread, and cultures of varying ages were tested for the presence of some spreading factor. Two-hour cultures of the streptococci were stained and capsules were demonstrated. These were not visible after seven hours. Extracts were then made from young and old cultures; they were filtered and mixed with trypan blue. A dose of 0·25 cubic centimetre was injected into the carefully shaven skin of the flank of rabbits and the animals were observed for sixteen hours. The control showed a dark blue button wheal about 2·0 by 1·5 centimetres, the filtrate from the sixteen-hour culture caused an almost identical appearance, but that from the two-hour culture had spread over an area of 2·0 by 5·0 centimetres. A saline extract of cocci was made by shaking, and the same spreading factor was present. The spreading factor was proved to be heat-labile, disappearing after one hour at 56° C., but not being inactivated by chilling. The young cultures containing the spreading factor were not agglutinable by immune sera containing a high titre for eighteen-hour cultures of the same organism. The young cultures also contained a slightly less amount of hæmolysin than the older cultures, from which the spreading factor had disappeared, thus seeming to demonstrate that the two were distinct. It is suggested that the capsular material of the young streptococci determines the altered tissue permeability which permits of invasion of the host's tissues.

Pulmonary Moniliasis.

A. HOBSON DAVIS AND EARL L. WARRNE (*Journal of Laboratory and Clinical Medicine*, April, 1937) have reviewed the literature and have reported a fatal case of pulmonary moniliasis. The organism belonged to the group of *fungi imperfecti*, and is widely distributed in Nature in the saprophytic state. It reproduces by budding and the formation of mycelia. The spores vary widely in size and morphology, and they grow freely on media containing glucose, at room temperature under aerobic conditions. The fermentation of sugars is not constant in all members of the group. The results of pathogenicity tests in mice were well marked. The use of rabbits differentiated three groups—one in which enormous intravenous doses failed to produce disease, one in which large doses were pathogenic, and one in which moderate doses produced lesions. Complement fixation and precipitation could be demonstrated with antigens prepared from the organisms, while agglutination tests were not satisfactory. Human infection can take place in the skin, where the organism is not a common saprophyte, and in bones and joints; infection of the human lung was first described in 1905. The case reported was that of a man aged forty-five years, who was under observation for seven months before death. The patient had a history of lassitude, increasing amounts of sputum, chest pain, dyspnœa, fever and intermittent attacks of pleurisy. X ray examination revealed infiltration and possible cavitation of the apices of both lungs. There was a remission and then a relapse, with abdominal pain and vomiting before death. The laboratory findings included a failure to react to the Wassermann test; the blood picture was that of an increasing anæmia with a mild leucocytosis; and the sputum, which was large in amount, was consistently negative for tubercle bacilli, while *Monilia albicans* was constantly present. It was found that a hanging drop preparation containing a drop of melted agar was a satisfactory medium in which to study its growth. The strain fermented mannite, maltose, dextrose and lævulose constantly with the formation of gas; it fermented dextrin, galactose and saccharose with the formation of acid. A rabbit injected intravenously with a saline emulsion of monilia died after seventeen days with abscesses in the cerebellum and the kidneys. Mice developed abscesses at the point of inoculation when injected subcutaneously with the organism, while intraperitoneal inoculation led to abscesses in the abdominal organs. Guinea-pigs proved entirely resistant to the organism. The patient's serum did not agglutinate his own strain or a known strain of *Monilia albicans*, but injection of the patient's organism into a rabbit produced a precipitin serum which reacted with the patient's organism.

Chemistry of Gaucher's Disease.

R. H. S. THOMPSON AND G. PAYLING WRIGHT (*Guy's Hospital Reports*, January, 1937) have analysed three spleens from patients suffering from Gaucher's disease. In order that comparisons might be made, a method comparable with those used in other workers' publications was used. All three spleens were removed at operation, and one was examined before and after fixation with a modified Kaiserling's solution. As a control a histologically normal spleen was also analysed. Amounts of tissue varying from 20 to 70 grammes in weight were washed in running water after fixation and dried *in vacuo* to a fine powder. Portions of this were extracted with ether for thirty hours, then for twelve hours with absolute alcohol at 60° C., and then with a further portion of alcohol at 100° C. After evaporation the ether and alcohol residues were weighed. The normal spleen contained 3·16 grammes per 100 grammes dried weight of ether-soluble material, and 4·45 grammes per 100 grammes of alcohol-soluble material. The three spleens from patients with Gaucher's disease averaged 4·2 grammes of ether-soluble and 19·0 grammes per 100 grammes of alcohol-soluble material, thus showing an increase in the alcohol-soluble fraction. Cholesterol estimations were made on the normal and Gaucher spleen, and the figures were almost identical. These findings were in general agree-

ment with those of other workers. A rough extraction of purified kerasin was then made by the method described by Lieb, and the solubility, melting point, and a colour reaction given with sulphuric acid, of the alcohol extract agreed with Lieb's claim that a large part of the alcohol-soluble fraction was kerasin. The colour reaction was obtained with a mercury-precipitated fraction, and as little as one milligramme gave a deep purple colour. When the solution was shaken with chloroform the colour stayed in the acid, but on standing the colour passed into the chloroform layer; when the solution was shaken the colour could be returned to the acid layer, an important differentiating point from cholesterol. Titration could demonstrate a rough parallelism between the amount of kerasin present and the depth of colour obtained, while the extracts from the normal spleen failed to give any colour reaction at all. Similarities between degradation products of some bacteria and this substance are discussed, and it is noted that possibly some diversion of the normal antibody mechanism is responsible for this disturbance of kerasin storage; the colour reaction and its possible use are also discussed.

HYGIENE.

Pathogenicity of Human Influenza Virus.

J. McINTOSH AND F. R. SELBIE (*The British Journal of Experimental Pathology*, August, 1937) have studied the pathogenicity to animals of viruses isolated from cases of human influenza. During the outbreak of influenza in the winter of 1936 two viruses were isolated *post mortem* from the lungs of young male subjects. Berkefeld filtrates of lung extract were cultivated anaerobically in Hartley's broth with 10% horse serum. Growth occurred after twenty-six days. The culture was then inoculated into ferrets and into groups of mice, the latter being inoculated with extract of turbinates, lung extract and Berkefeld filtrates from the ferrets. The ferrets all manifested lesions of hæmorrhagic type and a pronounced febrile reaction. The mice were less susceptible, and the virus exhibited a variation after the ninth passage, becoming relatively avirulent. The strain, however, continued virulent in the mouse after a subculture which had been inoculated into a rabbit was passed back into a ferret and then into mice, again killing 50% of inoculated mice in four and a half days. Aerobic inocula from the lungs of these mice were invariably sterile. Virulence of the virus to guinea-pigs was readily demonstrable; temperatures of over 105° F. were noted and frequent deaths took place. Protection experiments with human convalescent serum and with anti-influenzal horse serum showed some positive evidence in that deaths were fewer and later, although the actual incidence of lesions was not lessened. Complement fixation was obtained with an antigen of dried rabbit lung and human convalescent serum, and practically none with pooled normal serum. An inoculated monkey gave a febrile reaction at the end of the second week, and was killed on the thirtieth day; the typical lesions were found in the lungs. The authors comment on the slow development of the experimental disease in animals after intranasal inoculation.

Zinc Sulphate as a Prophylactic Agent in Epidemic Poliomyelitis.

R. STERLING PENTECOST (*Canadian Public Health Journal*, October, 1937) writes on zinc sulphate as a prophylactic agent in poliomyelitis. After preliminary tests with the help of "Pontocaine" the method selected for reaching the olfactory area was to place the child in the dorsal recumbent position with head extended. Then 0·5 cubic centimetre of solution (1% zinc sulphate and 1% "Pontocaine" in normal saline solution) was introduced by syringe and small cannula. A four-inch olive-tipped X-ray-opaque ureteral catheter of appropriate size (number 4, 5 or 6) was passed after preliminary partial anæsthesia (0·25% each of "Pontocaine" and ephedrin). With the head placed with the chin vertical to the external meatus, the olive tip was introduced for half an inch between the upper third of the middle turbinate bone and the nasal septum. The solution was then expelled directly onto the olfactory area and left for one minute. The patient then sat up, and, after snuffing up the nose, spat out the surplus. No discomfort, injury or bleeding occurred. Anosmia was immediate and lasted at least five days. Every patient had headache for some hours, together with a stuffy nose and a feeling of constriction between the eyes. All were quite well in twelve hours. No complications resulted. Many thousands of children and adults were treated in this way.

Anterior Poliomyelitis.

J. T. PHAIR, R. D. DEFRIES *et alii* (*Canadian Public Health Journal*, September, 1937) state that in the first six months of 1937 thirteen cases of poliomyelitis were reported in Ontario. The weekly incidence rapidly rose early in August to 355 cases in the first week of September. For the three months 1,089 cases had been notified (estimated cases to date, 1,200), a number far exceeding previous epidemic experience in 1929-1930. The authors state that the epidemic map suggests three foci of spread. On only fifteen occasions has the virus been eliminated from the nose and throat secretions of living human beings; from ten just before or during the acute stage; and from four in convalescence. One child, who gave no history of contact, had the virus in his tonsils and adenoids. The possible presence of the virus in the excreta warrants proper disinfection. Contact appears the most important avenue. The incubation period is stated as being three to twenty days, commonly seven to fourteen. In cities 90% of cases occur in children under ten years of age. In the country cases are more frequent in older patients, 20% occurring among those fifteen years and over. The fatality rate, lowest under five, tends to rise with age. Five males suffer compared with every four females. Multiple mild cases occur not infrequently in families, but more than one case of paralysis in the same family is rare.

Immune Serum and Influenza Virus in Vitro.

T. P. MAGILL AND THOMAS FRANCIS (*Journal of Experimental Medicine*, June, 1937) have studied the action of immune serum on human influenza virus *in vitro*. They have endeavoured to test the conclusion that no union between immune substance and virus occurs *in vitro*, although the infectious titre of the virus suspension may be reduced by this procedure. The PR8 strain of human influenza was used, the immune serum was obtained from rabbits and ferrets, and the tests for virus were made by mouse inoculation into the nasal passages and by examination of the lungs, according to previous methods. The chick embryo was grown in Tyrodes medium for twelve days before the mixtures were made. Experiments were planned to test the effect of altering each of the three constituents—cells, immune serum and virus. First, when immune serum was added before the virus, the virus failed to survive. Then two lots of embryo cells were treated, one with normal serum and one with immune serum; they were then washed and returned to the culture medium, and virus was added. Both cells and fluid part of the medum were found to contain virus fully lethal for mice. Then virus was added to cells, and these stood in contact for one hour before the addition of immune serum, and of normal serum to the control. Mouse tests revealed the presence of considerable amounts of virus in the cells; no active virus was present in the supernatant fluid, but the cells contained less than the normal controls. Then virus and immune serum were mixed for one hour, cells were added, then washed and added to fresh cells. The virus was completely inactivated and failed to multiply both in cells and supernatant fluid. The final experiment showed that the inactivation of the virus by the immune serum could take place in the absence of cells. These experiments showed that following incubation in the presence of sufficient amounts of immune serum, virus is inactivated and no longer detectable; high speed centrifugation does not throw out the virus as it does from mixtures of normal serum and virus.

British Medical Association News.

ANNUAL MEETING.

THE annual meeting of the Queensland Branch of the British Medical Association was held at British Medical Association House, Wickham Terrace, Brisbane, on December 10, 1937, DR. T. A. PRICE, the President, in the chair.

ANNUAL REPORT OF COUNCIL.

The annual report of the Council, which had been circulated amongst members, was taken as read on the motion of Dr. F. W. R. Lukin, seconded by Dr. Alex. P. Murphy, and was adopted on the motion of Dr. A. H. Marks, seconded by Dr. M. Graham Sutton.

The report is as follows.

The Council has pleasure in presenting the following report of the work of the Branch for the year ended November 15, 1937.

Membership.

The membership of the Branch is 520, as against 509 in 1936. The additions have included: Election of new members, 22; transfers from other Branches, 14; member reelected, 1; members reinstated upon payment of arrears of subscription, 7.

The losses have been due to: transfers to other Branches, 18; default in payment of subscription, 10; deceased, 5.

The Council regrets to record the death of the following members: Dr. G. W. F. Paul, Dr. Donald A. Cameron, Dr. Noel K. Lane, Dr. Simson Stuart, and Dr. E. F. Perry.

It is felt that special mention should be made regarding the late Dr. Donald A. Cameron, who was a former President. He always took a keen interest in the affairs of the Branch, and was instrumental in organizing the Queensland Medical Land Investment Company, Limited, with the object of acquiring premises for the Branch, which resulted in the erection of the British Medical Association Building in Adelaide Street.

Meetings.

General.

In addition to the annual general meeting, ten ordinary meetings of the Branch were held, of which two were clinical meetings.

There was also one extraordinary general meeting held to consider matters concerning various aspects of the medical services problem, at which 45 members were present.

The average attendance at the ordinary Branch meetings was 31.

Council.

Twenty-one ordinary meetings and six special meetings were held by the Council. The special meetings were held for the following purposes:

Joint meeting with the Honorary Staff of the Brisbane Hospital with regard to the present medical services of the hospital.

Re "Bay View" being utilized for the Branch office and library.

The establishment of a medical agency by the Branch.

Consideration of the medical services problem which is facing the profession. (Two.)

The action is to be taken with regard to Press criticisms concerning the practice of abortion.

The record of attendances of members of the Council was as follows:

	Ordinary		Special.
Dr. T. A. Price[1] (President and Federal Council Representative)	18	—	3
Dr. R. G. Quinn (President-Elect and Honorary Treasurer)	20	..	5
Dr. M. Graham Sutton (Past President)	13	..	2
Dr. L. W. N. Gibson (Honorary Secretary)	17	..	3
Dr. Ellis Murphy (Assistant Honorary Secretary)	15	..	5
Dr. N. W. Markell[2] (Chairman of Committees)	21	..	5
Dr. Neville G. Sutton (Honorary Librarian)	11	..	4
Dr. D. Gifford Croll (Federal Council Representative and Councillor)	19	..	4
Dr. P. A. Earnshaw (Councillor)	15	..	6
Dr. K. B. Fraser[3] (Councillor)	9	..	2
Dr. Noel M. Gutteridge (Councillor)	17	..	5
Dr. Basil L. Hart (Councillor)	16	..	6
Dr. S. F. McDonald (Councillor)	17	..	4
Dr. G. A. McLean (Councillor)	13	..	6
Dr. E. S. Meyers (Councillor)	10	..	4
Dr. J. G. Wagner (Councillor)	18	..	6
Dr. Charles E. Wassell (Councillor)	18	..	6
Professor H. J. Wilkinson (Councillor)	18	..	5

Scientific Meetings.

February.—Clinical meeting, combined with the Clinical Society of the Mater Misericordiæ Children's Hospital.

March.—Dr. J. V. Duhig: "The State of Medicine Abroad."

April.—Dr. Ellis Murphy: "Diseases of the Blood."

May.—Mr. E. J. D. Stanley (barrister at law): "Medical Evidence."

June.—Joseph Bancroft Memorial Lecture, delivered by Sir C. Stanton Hicks: "Organism—A Consideration of Vascular Transport."

July.—Dr. Neville G. Sutton: "Surgical Emergencies."

August.—Jackson Lecture, delivered by Dr. L. Cowlishaw: "Galen, the Medical Dictator: His Life and Influence on the Progress of Medicine."

September.—Dr. H. W. Johnson: "Anæsthetic Accidents."

October.—Dr. S. F. McDonald: "Danger Signs in Childhood."

November.—Clinical meeting combined with the Clinical Society of the Brisbane Hospital.

The following is the personnel of the Committee responsible for the arrangement of the programme of papers: Dr. P. A. Earnshaw, Professor H. J. Wilkinson, Dr. Noel M. Gutteridge and the *ex officio* members of the Council.

The Royal Australasian College of Surgeons.—Members of the Branch were invited to attend a lecture given in connexion with the annual meeting of the Queensland section of the Royal Australasian College of Surgeons on Wednesday, August 11, 1937, when a paper was delivered by Sir John McKelvey on "The Gall Bladder: Its Origin and Some of its Diseases".

Office-Bearers.

Dr. R. G. Quinn was elected President-Elect and Dr. Leslie Gibson was reelected Honorary Secretary.

The following office-bearers were elected by the Council:

Assistant Honorary Secretary: Dr. Ellis Murphy (reelected).

Honorary Treasurer: Dr. R. G. Quinn (reelected).

Chairman of Committees: Dr. N. W. Markwell (reelected).

Honorary Librarian and Curator of the Museum: Dr. Neville G. Sutton (reelected).

[1] On leave two meetings. [2] On leave one meeting.
[3] On leave five meetings.

Honorary Secretary: Dr. Leslie Gibson, who has held the position for three years, is retiring, and we would like to place on record our appreciation of his services during this period.

Honorary Treasurer: This position has been held by Dr. R. G. Quinn, in addition to his office of President-Elect.

Councillors.

Three members of the Council are not seeking election for next year, namely: Dr. E. S. Meyers, Dr. K. B. Fraser and Dr. G. A. McLean. The Council desires to express its appreciation of their past services.

Ethics Committee.

The following were reelected members of the Ethics Committee at the annual meeting of the Branch held on December 11, 1936: Dr. Alex. H. Marks, Dr. Mervyn S. Patterson, Dr. G. P. Dixon, Dr. Gavin H. Cameron, and Dr. G. W. Macartney.

No matters were received for reference to the Ethics Committee during the year.

Library.

The library is satisfactorily housed in the new Branch premises, where comfortable accommodation is available for members for reading. The new quarters situated on Wickham Terrace are more accessible, and members are making greater use of the library. During the year 99 books of various kinds were borrowed from the library.

Three bound volumes of medical journals are missing, namely, *The Journal of the American Medical Association*, January to March, 1931; *The British Journal of Surgery*, Volume I, 1934; *The British Medical Journal*, Volume I 1934. As it is impossible to replace back numbers of journals, members are requested to keep a strict record of any books borrowed from the library, and if a journal is passed on to another member of the Branch, it is requested that the office be informed so that a record may be made of the transfer.

The only additions of medical journals to the library have been *The New Zealand Medical Journal* and *The Hospital Magazine*, which is published by the Charities Board of Victoria.

We are indebted to Dr. S. F. McDonald for some volumes of "The Collected Papers of the Mayo Clinic", which he kindly presented to the library.

Representation.

The Branch was represented as follows during the year:

Council of the British Medical Association, 1936-1937: Professor R. J. A. Berry.

Representative Body, Annual Meeting, July, 1937: Dr. A. J. Foote (Representative), Dr. H. W. Anderson (Deputy Representative).

Federal Council of the British Medical Association: Dr. T. A. Price and Dr. N. W. Markwell (substitute for Dr. D. Gifford Croll).

Australasian Medical Publishing Company, Limited: Dr. D. Gifford Croll.

Australasian Medical Congress (British Medical Association) Fifth Session, Adelaide: Dr. Alex. Murphy.

Medical Officers' Relief Fund (Federal): Dr. W. N. Robertson, Dr. D. Gifford Croll, Dr. J. Cameron Hemsley.

Queensland Medical Board: Dr. R. G. Quinn, Dr. Kenneth Wilson, Dr. Leslie Gibson.

New Education Conference: Professor H. J. Wilkinson.

Queensland Post-Graduate Committee: Dr. S. F. McDonald, Dr. E. S. Meyers, Dr. Alex. Murphy.

Queensland Cancer Trust: Dr. B. L. W. Clarke, Dr. Clive Uhr.

Queensland Nutrition Council: Dr. P. A. Earnshaw and Dr. Noel M. Gutteridge.

Queensland Bush Nursing Association: Dr. N. W. Markwell.

Animal Health Board: Dr. D. Gifford Croll.

Standards Association of Australia: Dr. W. N. Robertson and Dr. E. O. Marks.

Eighth Australian Cancer Conference: Dr. B. L. W. Clarke.

North-Eastern Medical Association, Twenty-fifth Anniversary Jubilee Meeting (Lismore): Dr. N. W. Markwell.

Australian Inland Mission: Dr. J. G. Wagner.

The Editor of THE MEDICAL JOURNAL OF AUSTRALIA was represented by Dr. Joyce Stobo.

Subcommittees.

Hospital.

Personnel: Dr. Neville G. Sutton, Dr. E. S. Meyers, Dr. C. E. Wassell, Professor H. J. Wilkinson, and the *ex officio* members of the Council.

Twenty meetings were held and many important matters were considered, the main ones of general interest being as follows:

Amendment of Hospital Act.—Although strong representation was made that the Hospital Bill to amend the *Hospitals Acts* be made available to the British Medical Association before it was passed through Parliament, the Council's request was refused on the plea that "no public body receives Bills for discussion before they are printed". This plea, however, is hardly tenable, as other organizations have been granted this privilege.

Under the new Act all appointments of medical officers to hospitals must be approved by the Director-General of Health. This provision should assist country hospital committees in obtaining the services of suitable doctors.

The Council is of the opinion that medical practitioners in country districts, particularly in sparsely populated areas, must receive fair treatment and adequate remuneration, if the medical service is to be satisfactory. A salary of at least £750 *per annum* should be paid to full-time medical officers, or to those who have little or no scope for private practice.

Private Hospital Regulations.—The new regulations dealing with private hospitals became operative on June 3, 1937. Under the original regulations issued on the above-mentioned date, Regulation Number 5 provided that every case admitted to a private hospital must be recorded in a case register, to be forwarded to the Director-General every six months. As a result of a protest the case book is now kept at the hospital. A letter was sent to the Minister requesting that the principle of professional secrecy be preserved, and that no new regulation be put into operation which does not take cognizance of this principle. It was further stated that if one of the objects of Regulation Number 5 is to mitigate the evil of illegal operations, the Council would be willing to participate in a conference with the Director-General of Health and the Commissioner of Police to consider the question. A preliminary conference on the subject has already been held at which the following were present: The Minister of Health and Home Affairs, the Director-General of Health, and representatives of the Queensland Medical Board and of the Council of the British Medical Association. A further conference is to be arranged as soon as the parties concerned are available.

Intermediate Wards at the Brisbane Hospital and the Mater Misericordiæ Hospital.—Intermediate wards have recently been opened at the Brisbane Hospital, and they are available to all registered medical practitioners. A small intermediate block has also been opened at the Mater Misericordiæ Private Hospital, and the Council has been informed that such beds will be open to all registered medical practitioners.

Brisbane and South Coast Hospitals Board—Medical Services.—The question of the reorganization of the medical services at the Brisbane Hospital has been under consideration for some time, and the honorary staff has submitted a proposal to the Board embodying provision for part-time paid medical services. The matter is at present before the Board, but so far no finality has been reached. The question is one of urgency, as provision has to be made for the teaching of students from the Medical School of the University of Queensland, and also, as the position at the hospital, under the present system, is most unsatisfactory both from the point of view of the public and of the medical profession.

Rules and Ethical.

Personnel: Dr. D. Gifford Croll, Dr. Neville G. Sutton, Professor H. J. Wilkinson, and the *ex officio* members of the Council. During the year twenty meeting were held, and reports on various matters were submitted to the Council for subsequent action.

By-Law Number 23—Resumption of Practice.—The question of amending this by-law was under consideration, but it was decided not to make any alteration. Members have been reminded that a "Resumption of Practice" advertisement must not be inserted unless the period of absence has been for one month or more.

Scale of Minimum Fees.—The amendment of a scale of fees issued some years ago is under consideration by a special subcommittee. The proposed amended scale has been circulated to all members for their comment. The object is to provide a scale to specify the average fees to which a doctor is entitled for his services, there being nothing to prevent him from charging a lower fee where the patient is in straitened circumstances or a higher fee where it is justified by special skill and experience. It is proposed to hold a special meeting of the Branch to deal with this matter.

Broadcast Health Talks.—It has been ruled that such broadcast talks may be given under the ægis of the British Medical Association, but that no names shall be mentioned.

Doctors' Prescriptions Displayed in Chemists' Shop Windows.—A protest was made regarding the display of original prescriptions with the doctor's signature, and an assurance has been given that in future this practice will be discontinued and that "dummy prescriptions" will be used.

Country Representation on the Branch Council.—It has been decided to make provision for the representation of country members on the Council of the Branch, and the following districts have been asked to nominate a representative: Northern, Central, North Coast (including Maryborough, Bundaberg, Gympie, Kingaroy) and South-Western. The local associations in these districts have been requested to nominate a member, whose duty it will be to place important matters before the Council, and he, or a locally appointed proxy, may attend Council meetings.

The following representatives have so far been appointed: Northern District, Dr. V. F. A. O'Neill; North Coast (including Maryborough, Bundaberg, Gympie, and Kingaroy), Dr. G. R. Woodhead.

Workers' Compensation Insurance.—A meeting with the Insurance Commissioner and the Medical Officer of the State Government Insurance Department was held in June, when the question of "Easily Given Certificates" was stressed by the Commissioner. A suggestion was made for the amendment of Form 5. It was further suggested that to deal with differences of medical opinions, a senior medical man (appointed by the British Medical Association) should act as chairman to meet the Insurance Medical Officer and the opposing parties. During the interview the following recommendations were submitted by the representatives of the Branch:

> That workers' compensation should be an integral part of a general medical service, and where introduced separately, should be designed so that it can form an essential part of such a service when it is completed.
>
> That workers' compensation, as it exists today (in Queensland) is unsatisfactory because: (i) Medical benefits are not included. (ii) More effective supervision is required. (iii) This supervision should be professional.

Proposed Medico-Legal Society.—At present a constitution is being drawn up for a Queensland Medico-Legal Society, which it is hoped will be inaugurated in the near future.

Formation of Special Associations Within the Association.—The Council has approved of the proposed by-laws which were drawn up by the Federal Council and have been submitted to the parent body for ratification.

Organization of the Medical Profession in Australia.—The possibility and desirability of forming an Australian Medical Association has been referred to the Branches by the Federal Council for an expression of opinion. No decision regarding this important matter has been reached.

Uniform Medical Registration.—The Council has expressed the opinion that uniform registration of medical practitioners in Australia is desirable. A request has been made to the Federal Council that the Commonwealth and State Governments be approached with a view to achieving this.

Queensland Medical Board.—Notification was received from the Department of Health and Home Affairs advising the appointment of the following representatives of the British Medical Association on the Queensland Medical Board: Dr. Kenneth Wilson, Dr. R. G. Quinn and Dr. Leslie Gibson. The appointments are for a period of three years.

Public Health.

Personnel: Dr. N. M. Gutteridge, Dr. S. F. McDonald, Dr. P. A. Earnshaw and the *ex officio* members of the Council.

Various matters have been dealt with under this heading during the year.

Since August, 1936, 4,800 pamphlets, "Adequate Nutrition During Pregnancy and Nursing", have been distributed to members of the Branch to be given to their patients.

Assistance has also been given to the Queensland Nutrition Council in the circulation to members of the Branch of a card entitled "Guide to Modern Menu Planning" and the Nutrition Year Book, published by that body.

The committee appointed to deal with the matter of anti-gas and air-raid precautions has met on two occasions. The personnel of the committee, which has been added to during the year, is as follows: Dr. C. E. Wassell, Dr. A. H. Marks, Dr. M. Graham Sutton, Dr. E. S. Meyers, Dr. S. F. McDonald, Dr. W. H. Steel, Professor D. H. K. Lee, Colonel R. M. Stodart, Major C. W. Huxtable. It has been decided to invite Professor T. Parnell and Mr. F. C. Bennett to join the committee.

The Minister of Health and Home Affairs has been approached to consider the question of calling a conference of interested bodies to set up a central committee for the State in connexion with air-raid precautions. The Federal Council has been asked to approach the Commonwealth Government to ascertain what equipment is available at present. Various other organizations have been interviewed with whom cooperation on different aspects is necessary.

Regarding Aerial Medical Services, Dr. J. G. Wagner, who acts as our representative, has reported that several of the hospitals situated in the far north are cooperating with the Australian Inland Mission to provide medical services in these areas. On July 9, Dr. G. Simpson, Honorary Secretary of the Federal Council of the Aerial Medical Services, was present at a Council meeting of the Branch, when the position, as it exists in Queensland, was explained to him.

With the object of ascertaining the position in country towns concerning civil aviation landing grounds, as many doctors have to make journeys by aeroplane in cases of acute illness or accident, all the local authorities in Queensland were communicated with on the subject. Twenty-eight replies were received, from which it appeared that suitable landing grounds were available or were being prepared. This action was taken at the request of the Federal Council.

At the request of the Mothercraft Association of Queensland, permission was granted for members of the Branch to act as the endorsing authority in connexion with the Mothercraft Baby (Progress of Health) Competition, provided that the baby brought to them is not under the care of any other medical practitioner.

Publicity.

Personnel: Dr. C. E. Wassell, Dr. N. M. Gutteridge, Dr. K. B. Fraser, and the *ex officio* members of the Council.

Two meetings were held, when various matters of Press publicity were dealt with, and action recommended to the Council.

With a view to creating a better understanding of the point of view of the Press and of the medical profession concerning publicity, it has been suggested that a conference of representatives of the interested parties be held. The medical profession and the British Medical Association have figured largely in the Brisbane Press during the past year, and it is felt that much misunderstanding could be avoided by a better appreciation of the attitude underlying the ethical principles of the medical profession regarding publicity.

Building.

Personnel: Dr. D. Gifford Croll, Dr. S. F. McDonald, Dr. W. N. Robertson (coopted), and the *ex officio* members of the Council.

Seven meetings were held, and as this committee deals with all matters concerning the Branch premises, it has been a most eventful year.

As a result of the sale of the Adelaide Street property, early in the year, it was decided to have the Wickham Terrace premises renovated and made suitable to house the Branch. This is now known as "British Medical Association House", and it was occupied as Branch headquarters in March last.

The building contains a meeting room, which will hold forty, a council meeting room, library, offices *et cetera*. The British Medical Agency of Queensland Proprietary, Limited, also has its offices on the premises. The new quarters are very convenient and comfortable.

Dr. M. Graham Sutton has kindly made and donated a large hat rack, which was greatly needed.

As the money from the sale of the Adelaide Street property becomes available to the Queensland Medical Land Investment Company, Limited, it is loaned to the Branch, which has acquired the majority of the shares in the company. The sum received from the source mentioned is used to pay off amounts which have been loaned to the building fund by members at an interest rate of 5% *per annum*. So far the sum of £1,900 has been paid back, such repayments being decided by drawing lots amongst the members who have lent the money.

The sinking fund, which was established with the object of forming a nucleus to finance a new building at some future date, at present stands at £290 16s. 9d. The fund was augmented during the year by the generosity of Sir David Hardie, who contributed £100. We desire to express our appreciation of this generous donation.

When funds permit the Council will consider erecting a new building on the present site, which is eminently suitable for the purpose. As much money as possible will be transferred to the sinking fund from surplus Branch funds. The sooner this fund is built up, the sooner will it be possible to commence building suitable premises for the headquarters of the Branch. Donations from members to this fund will greatly assist in expediting the fulfilment of this hope.

We are indebted to Dr. W. N. Robertson for transferring his shares in the Queensland Medical Land Investment Company, Limited, to the Branch. This represents an amount of £50. It might also be added that Dr. Robertson has handed the interest received from these shares to the Branch for the past two years.

Lodge Contract Practice.

Lodge matters are now dealt with by the Lodge Subcommittee of the Council and a joint committee of representatives of the Branch and of the Friendly Societies Medical and Hospital Council.

Personnel and Lodge Subcommittee: Dr. J. G. Wagner, Dr. Basil Hart, Dr. G. A. McLean and the *ex officio* members of the Council.

Personnel of Joint Committee, British Medical Association Representatives: Dr. T. A. Price, Dr. J. G. Wagner and Dr. F. W. R. Lukin.

Each of the above-mentioned committees has met four times during the year.

In accordance with the agreement with the Friendly Societies Medical and Hospital Council, no amount is now deducted from the metropolitan capitation fee by that organization for management expenses. Otherwise, no alteration has taken place in the capitation fee.

Lodge matters have been running very smoothly, and the Joint Committee has been responsible for the settling of several differences, which were mainly due to misunderstanding on the part of either the lodge patient or the doctor.

A number important rulings have been given and circulated to members holding lodge appointments, and in some instances to lodge secretaries.

Interpretation of Clause 25 of the Lodge Agreement.—The question was raised as to whether a widowed mother of two sons, who are lodge members, is entitled to medical attention by the lodge medical officer. The following ruling was given by the Council: "The literal interpretation of the agreement is that such a person would not be entitled to medical benefit, but the British Medical Association will consider each case on its merits."

Other rulings, as follows, were circulated to lodge medical officers:

Re Surgical Induction of Labour.—No fee to be charged beyond the anæsthetic and confinement fee.

Re Microscopical Examination of Urine.—Fee of 10s. 6d. to be charged.

Juvenile Members.—It has been decided that the examination of juvenile members be compulsory before being placed on a doctor's list. Also that juveniles cannot be transferred during illness.

Re Prescribing Patent Medicines.—In prescribing patent medicines, lodge medical officers are requested to consider the expense to the patient as far as possible without sacrificing the efficiency of treatment of the patient.

Re Issue of Sick Declaration Forms.—Lodge medical officers are asked to use the official forms issued by the Friendly Societies Medical and Hospital Council wherever possible.

Re Declaration "On" and "Off" for Sickness Benefit.—It has been decided that such declarations must be given on the dates concerned. There should be no predating or postdating.

Re Removal of Lodge Patients from Doctors' Lists.—The lodges have asked that any request for the removal of a lodge patient from a doctor's list should be made in writing to prevent the doctor from obtaining a picked list of members. Also that there should be a reasonable excuse for the removal of any lodge patient from a doctor's list.

General Medical Services.

Personnel: Dr. T. A. Price (chairman), Dr. R. G. Quinn, Dr. D. Gifford Croll, Dr. N. W. Markwell, Dr. J. G. Wagner, Dr. F. W. R. Lukin.

This committee met on five occasions during the year, and, in addition to the general medical services policy of the Branch, the question of national health insurance has received close attention.

At a joint meeting with representatives of the Friendly Societies Medical and Hospital Council and members of the General Medical Services Committee held on July 25, 1937, the following resolution was unanimously carried:

> That the Friendly Societies Medical and Hospital Council reaffirm their general approval of the basic principles underlying the policy of the Queensland Branch of the British Medical Association for a general medical service for Queensland.

On April 8, 1937, an extraordinary meeting of the Branch was held, at which Dr. J. G. Hunter, General Secretary of the Federal Council of the British Medical Association in Australia, was present. "Consideration of the Medical Services Problem" was the business set down for the meeting. Dr. Hunter gave his impressions of the working of the health insurance scheme in England. He stated that he went to England specially to study national health

insurance and he had come back convinced that national insurance is necessary for the health of the community.

As a result of a grant from the Parent Body to the Federal Council, Dr. Hunter's services were made available to the Branch, and on June 29 our President, Dr. T. A. Price, and Dr. Hunter commenced a tour of the Queensland coastal districts, returning to Brisbane on July 22. They visited Cairns, Atherton, Innisfail, Ingham, Townsville, Ayr, Mackay, Rockhampton, Gladstone, Bundaberg, Maryborough and Gympie. They were warmly welcomed everywhere. In some cases they addressed meetings at which only members of the British Medical Association were present when they gave details of the general medical services policy of the Branch and pointed out the disadvantages of institutionalism and the difficulties that are likely to follow.

They also addressed meetings of representatives of friendly societies, trades unions, hospital boards, local authorities and dentists. They had good meetings in all the towns, and they reported that the emphasis of the general medical practitioner service, with the patients' own choice of a doctor, appealed particularly to the lay audiences. This was a most valuable piece of organization work, for which the thanks of the whole of the members of the Branch are due.

In February the President visited the South Burnett Medical Association and explained the general medical services policy of the Branch to the members in that district. He also visited Murgon and Monto to consult with the members of the Branch at each of these centres on local matters.

A letter has been sent to the Federal Council stating that if the Commonwealth Government approaches the Federal Council with a view to instituting a scheme of national health insurance, the Queensland Branch considers the matter is of such importance that it would be willing to send delegates to a special meeting of the Federal Council to discuss the subject with the Commonwealth Government. Further developments are now awaited.

It was hoped that Sir Henry Brackenbury would be able to visit Brisbane for the purpose of assisting the Branch in the general medical services scheme on his return journey from New Zealand. Unfortunately he found this impossible owing to limited time.

Parliamentary.

Personnel: Dr. D. Gifford Croll, Dr. S. F. McDonald and the *ex officio* members of the Council.

No business was dealt with by this subcommittee during the year.

Sections for Special Branches of Medical Knowledge.

Eye, Ear, Nose and Throat Section.

The following office-bearers were elected at the annual meeting held on December 8, 1936:

President, Dr. E. J. McGuinness; *Vice-President*, Dr. F. G. Meade; *Councillor*, Dr. H. W. Savige; *Auditor*, Dr. L. T. Jobbins; *Honorary Secretary and Treasurer*, Dr. Athol Quayle.

Two meetings were held at British Medical Association House, one in March and the other in September.

Cases of interest were exhibited and discussed at each meeting.

Surgical Section.

Inaugurated February, 1927, office-bearers for the year were: *President*, Dr. J. M. Thomson; *Honorary Secretary and Treasurer*, Dr. Alan E. Lee; *Committee*, Dr. E. S. Meyers, Dr. L. M. McKillop and Dr. R. G. Quinn.

Owing to the pressure of other activities of importance to its members, only two meetings of the section have been held during the year.

At the first meeting Dr. E. D. Ahern read a paper on "Stone in the Common Bile Duct" and Dr. Alan E. Lee a paper on "Reconstruction of the Common Bile Duct after Injury".

At the second meeting Dr. J. R. S. Lahz read a paper on "Surgical Experiences Abroad".

There was an average attendance of ten members.

Obstetrical Section.

Inaugurated November 15, 1937, the annual meeting was held on February 23, 1937, when the following officers were elected: *President*, Dr. D. Gifford Croll; *President-Elect*, Dr. J. A. Cameron (Ipswich); *Statistical Committee*, Dr. Kenneth Wilson, Dr. R. G. Quinn and Dr. L. H. Foote; *Honorary Secretary and Treasurer*, Dr. L. H. Foote.

Four quarterly meetings have been held.

In October, 1936, Lady Cilento presented a paper on "Exercises During and after Pregnancy" with a demonstration by a masseuse.

At the annual meeting Dr. Gifford Croll read a paper as incoming President.

The June meeting was combined with the monthly meeting of the British Medical Association. Subject: "Gonorrhœa in the Female", by Dr. Beatrice Warner, Dr. Kenneth Wilson and Dr. S. Julius.

The August meeting was held in conjunction with the Ipswich Hospital Clinical Society, when a series of selected cases from the records were discussed.

To date, 3,784 cases have been recorded and entered in the statistics.

New members would be heartily welcomed.

Medical Section.

Inaugurated June 1, 1928. No meetings of the Medical Section were held during the year 1937.

Radiological Section.

Inaugurated March, 1930. No meetings of the Radiological Section were held during the year 1937.

Affiliated Local Associations.

Downs and South Western Medical Association.

The eleventh annual general meeting of the local association was held on September 25, 1937.

Meetings.—During the year just concluded eight general meetings were held, two executive committee meetings and one special meeting of the committee, with members who hold lists of British Medical Association contract medical service patients. Particulars of the general meetings are as follows. At the last annual general meeting Dr. Neville Sutton spoke of "Recent Advances in Surgery". In October Dr. Meehan gave a lecture on "Staphylococcal Infection of Bone". In November, Dr. Eustace Russell, on "Clinical Aspects and Treatment of Hypopiesis and Hyperpiesis". In February Dr. Markwell spoke on "The Use of X-Rays in the Diagnosis of Cardiac Conditions". In March Professor Helmore, at a combined meeting with the dentists, chose the subject of "Fractures of the Mandible". In May Dr. L. M. McKillop discussed essential points in the diagnosis of early malignant disease and described the methods in use for its treatment at Brisbane. In June Dr. C. Sippe spoke on "Chronic Non-Tubercular Chest Conditions", and in August a clinical meeting was held.

The lectures delivered by the above gentlemen have been much appreciated, and our association is indebted to them for their valued assistance. We are also appreciative of the Queensland Post-Graduate Committee's help in arranging for lecturers to be available, without which we could not have enjoyed such a series of lectures.

During the year the question of establishing a blood transfusion service was again investigated. A subcommittee was appointed to discuss details, and, with the aid of the Toowoomba Toc H Society, who voluntarily offered their services as donors, a blood transfusion service has become an accomplished fact. For their help in this connexion we are specially appreciative of the action of members of the Toc H Society.

It has not been found practicable to hold any meetings in centres other than Toowoomba during the past year.

Membership.—The number of our financial members stands at 18, as compared with 27 for the preceding year.

Finance.—The financial statement to be presented shows a credit balance of £2 14s. 5d. The small credit balance is, to a large extent, due to the subscription paid amounting to only £16 5s. 6d., whereas in the two previous years they have been £28 17s and £27 17s. respectively.

Contract Medical Services.—A change has taken place in the method of conducting the service as from May, 1937. On instructions from the Queensland Branch, the Central Office was closed in May, and subsequently each member has assumed the management of his own list from that date.

Acknowledgements.—Our thanks are due to the Toowoomba Hospitals Board for making accommodation available for our regular monthly meetings.

A. W. L. ROW,
President.

R. J. H. SPARK,
Honorary Secretary.

Bundaberg Local Association.

The only matter to report is a visit of Dr. Price, President of the Queensland Branch of the British Medical Association, and Dr. Hunter, General Secretary of the Federal Council. These gentlemen explained national insurance.

EGMONT SCHMIDT,
Honorary Secretary.

Rockhampton Local Medical Association.

The annual meeting of the above association was held in February and the following officers were appointed: *President*, Dr. F. C. Wooster; *Vice-President*, Dr. W. E. Hasker; *Honorary Secretary*, Dr. Trevor Parry.

In July a meeting was held at which Dr. McKillop gave a very instructive post-graduate lecture on "Malignant Disease", and later in the year a meeting was held at which Dr. T. A. Price and Dr. J. G. Hunter placed before the members the views of the Queensland Branch of the British Medical Association on national insurance.

TREVOR A. PARRY,
Honorary Secretary.

Townsville Local Association.

October, 1937.—Officers: *President*, Dr. V. F. O'Neill; *Honorary Secretary*, Dr. H. A. Sundstrup; *Honorary Treasurer*, Dr. A. M. Myers.

During the year four ordinary and one special meetings were held. Most of the business transacted was of a local nature.

On August 6 an interesting paper entitled "Injuries to Man by Plants and Animals" was read by Dr. Flecker, of Cairns, and on October 7 at the meeting held in conjunction with members of the Dental Association a paper was read by Dr. T. E. Gibson entitled "Impressions of an Australian at the Mayo Clinic".

A special meeting was called on July 7, 1937, to hear the addresses of Dr. Price and Dr. Hunter on "National Health Insurance". This, of course, is a matter of vital importance and every medical man is, or should be, interested in it.

This Local Association desires to pay a tribute to the excellent work of Dr. Price during his term as President, and we expect that great benefit will be derived from Dr. Price's journey into the country districts.

This Local Association is also pleased that at last the country is to have direct representation on the Branch Council.

H. A. SUNDSTRUP,
Honorary Secretary.

Cairns Local Medical Association.

The Cairns Local Medical Association has had a quiet year. There have been no contentious matters to be dealt with during the year. The members were pleased to have the opportunity of welcoming the President of the Queensland Branch and the Secretary of the Federal Council and were very interested to hear their views of the future of the medical profession. It was agreed to support the nomination of the Townsville Branch for a representative on the Council.

T. G. HEWITT,
Honorary Secretary.

The South Burnett Medical Association.

This association has held five meetings during the past year. On each occasion medical and surgical cases have been demonstrated and discussed during the afternoon. The evening sessions of our first two meetings were devoted to medico-political discussion. In February Dr. T. A. Price, President of the Queensland Branch of the British Medical Association, visited us and outlined the attitudes and policies of the British Medical Association in Queensland on many matters. We were a good deal the wiser for his informative address. For our May meeting we were without visitors and held an informal discussion on "Fractures of the Lower Limb". In July Dr. Alan Lee and Dr. Athol Quayle, of the Brisbane Clinic, gave addresses on "Abdominal Pain" and "Nasal Sinusitis" respectively, both of which were much appreciated. For our October meeting Dr. F. J. Booth, of the Physiology Department of the University of Queensland, gave a very interesting and informative address on "Some Recent Advances in the Physiology of the Cardio-Vascular System in Relation to Clinical Medicine".

At our annual meeting in October the following office-bearers were elected: *President*, Dr. P. Davidson; *Vice-Presidents*, Dr. J. S. Stobo and Dr. J. C. Thompson; *Honorary Secretary and Treasurer*, Dr. R. V. Rickard.

R. V. RICKARD,
Honorary Secretary.

Maryborough Local Medical Association.

It is very pleasing indeed to note that the Maryborough Local Association has thrown off its lethargy and has become very active during the last twelve months.

Clinical meetings have been held every month, members taking it in turn to read papers.

At the last annual meeting Dr. Woodhead was elected President and Dr. O'Regan, of Mundubbera, Vice-President.

On two occasions during the year papers and demonstrations were given by visiting specialists from Brisbane.

We were very fortunate in having Dr. Eustace Russell and Dr. Graham Brown in April. Dr. Graham Brown gave two very interesting demonstrations on cases of pansinusitis and also favoured us with an interesting lecture on ear, nose and throat work. Dr. Russell chose blood pressure, and we are very indebted to him for his very interesting and comprehensive address.

In September Dr. Neville Sutton and Dr. Sippe were our guests at a very interesting meeting. Dr. Sippe gave us a paper on food allergy and its relation to medicine, while Dr. Sutton held his audience with "Recent Advances in Surgery".

On both occasions we were able to entertain a number of our brother practitioners from Gympie, Bundaberg, Kingaroy, Biggenden, Gayndah and Howard.

It is certainly a great pleasure to us to be able to welcome our nearby friends and renew friendships.

The President of the Queensland Branch, Dr. Price, and the General Secretary of the Federal Council, Dr. Hunter, visited Maryborough in July in the course of a trip throughout Queensland. The object of this trip was to explain the policy of the British Medical Association with regard to national insurance to members, hospital boards, dentists, trades union leaders, friendly society members

and influential citizens. They were well received by the community generally and had a very enthusiastic meeting in the Town Hall.

We trust that their efforts will be productive of some good and lead to a better understanding.

Now that we have started we trust that the monthly clinical meetings will be continued with the enthusiasm and keenness displayed by all members during the last year.

O. E. NOTHLING,
Honorary Secretary.

Gympie Local Association.

At a meeting of the Gympie Local Association on October 9, 1937, the retiring President, Dr. A. F. Kelly, being absent, Dr. Millett was elected chairman of the meeting. The meeting was held in association with a clinical meeting.

At the clinical meeting Dr. Bruce Barrack read a paper on "Skin Diseases". He referred to those diseases associated with dairying, including chronic paronychia, eczema, and mycoides inflections. Dr. Outridge presented two cases for discussion and a general discussion followed.

Dr. P. A. Earnshaw read a paper entitled "Acute Anterior Poliomyelitis: Its Diagnosis and Treatment", referring to all aspects of the disease, and read a report on that subject as discussed at the Adelaide congress.

The annual meeting was then held. Dr. Millett was elected President and Dr. May as Honorary Secretary for the forthcoming year.

A motion that "Dr. Woodhead be the nominee to the British Medical Association Council to represent the district from Gladstone to Gympie, or the Central Coastal District", was carried and notification sent to Maryborough Local Association.

General business followed and finally votes of thanks were accorded the visiting members.

GARTH MAY,
Honorary Secretary.

Queensland Post-Graduate Committee.

Annual Report, August, 1937.

Personnel of Committee: Chairman, Dr. S. F. McDonald; Vice-Chairman, Dr. A. V. Meehan; Honorary Secretary-Treasurer, Dr. Horace W. Johnson; Dr. Alex. Murphy, Dr. E. S. Meyers, Dr. Ellis Murphy, Dr. Neville Sutton, Dr. N. W. Markwell, Dr. P. A. Earnshaw, Dr. G. C. Taylor, Dr. G. A. McLean, Dr. L. M. McKillop, Dr. C. E. Wassell, Dr. J. V. Duhig, Dr. L. W. N. Gibson, Dr. E. O. Marks, Dr. Alan E. Lee, Dr. D. A. Cameron, Professor H. J. Wilkinson, Professor D. H. K. Lee.

Meetings.—Eleven meetings of the committee were held during the year.

We regret to record the death of Dr. D. A. Cameron which took place in April. Dr. Cameron was a member of the committee since its inception.

In October it was resolved that the Constitution of the committee be altered to provide for the representation of the Faculty of Medicine and Professors Lee and Wilkinson were subsequently appointed.

Dr. Meyers, Dr. Markwell and Dr. Neville Sutton were reappointed for a further period of two years as representatives of the B.M.A. Council; Dr. L. W. N. Gibson was appointed to represent the Hospital for Sick Children; Dr. J. V. Duhig was reelected as representative of the Brisbane Hospital.

Annual Post-Graduate Course.—This year's course was held from May 31 to June 11, 1937. The membership numbered 88, including 6 from the country. The membership showed a big increase on previous years.

Visiting lecturers were Dr. Douglas Thomas, Mr. Wilfrid Vickers, and Sir Stanton Hicks, who delivered the Joseph Bancroft Memorial Lecture.

The lectures of the visitors were of a particularly high standard and the attendance at all was excellent.

The dance held on June 2 was even more enjoyable than in previous years, and the Honorary Secretary, Dr. Noel M. Gutteridge, is to be congratulated upon the success of the function. Representatives of several other professional organizations were invited as official guests.

Professor Meakins's Visit.—The committee were fortunate enough to be able to include Professor Jonathan Meakins as a lecturer during the course, as the time of his visit to Brisbane coincided with the time of the annual course. Five members enrolled specially to attend these lectures.

Local Associations. — Various lecturers visited Toowoomba, Wondai and Lismore under the auspices of the committee.

General Business.—This year was marked by grants to various bodies which it was considered came within the scope of post-graduate activity. Micro-projection apparatus: a donation of £100 was given to the University of Queensland to assist in the purchase of a micro-projection apparatus. Poliomyelitis film: under the direction of Dr. Meehan, which is almost completed, a grant of £30. Jackson lecture: grant of £10 to defray expenses of Dr. L. Cowlishaw, of Sydney. Nutrition film: a grant of £15 was given to the Queensland Nutrition Council to assist in the purchase of this film. Venue of meetings: the meetings of the committee are now held at British Medical Association House, 225 Wickham Terrace, Brisbane, instead of at Ballow Chambers.

Finance.—It will be noted from the balance sheet that there is a credit of £315 11s. 11d. in the Commonwealth Savings Bank. This year's course resulted in a credit balance of about £12.

Joseph Bancroft Memorial Lecture.

Sir C. Stanton Hicks delivered the 1937 lecture on Friday, June 4, at the Macgregor School of Physiology of the University of Queensland. The subject of the lecture was "Organism: A Consideration of Vascular Transport". Representatives of the Board of Faculties of the University and of the Council of the Royal Society were present as usual, and there was an attendance of sixty-five members.

Mrs. T. L. Bancroft, a daughter-in-law of the late Dr. Joseph Bancroft, attended the lecture by special invitation.

The President presented the Joseph Bancroft Memorial Medal to the lecturer in honour of the occasion.

Jackson Lecture.

The Jackson Lecture was delivered by Dr. L. Cowlishaw on Friday, August 6, 1937, and, as usual, took the form of a subject on medical history. The lecture was entitled "Galen, the Medical Dictator: His Life and Influence on the Progress of Medicine". It was greatly enjoyed by all those who had the privilege of hearing it.

William Nathaniel Robertson Fund.

As an appreciation of the valuable work done in the interests of the medical profession for a period of over thirty-five years, the members of the Queensland Branch of the British Medical Association have subscribed to a fund amounting to the sum of £206 15s. 1d.

In view of the fact that Dr. Robertson has been Vice-Chancellor of the University of Queensland for the past ten years and practically since the inception of the university he has been a member of the Senate, the Council has offered the fund to the Senate of the University for the following purposes and on the following conditions: To provide a medal to be awarded annually to the most successful candidate in the final examination of the medical course, the first medal to be awarded as a result of the final examination in 1940. The medal is to be called the "Dr. William Nathaniel Robertson Medal". A proportion of the fund is to be used for the striking of and providing the medal, the balance to remain at interest until it accumulates to a sum, the interest of which amounts to at least £10 *per annum*, after which time, in addition to the medal, a monetary prize of £10 shall be awarded.

Dr. Robertson's association with the Branch is well known, as he was a member of the Council continuously for many years, and he held the office of President for four separate terms. He also represented the Branch on the Federal Committee of the British Medical Association in Australia for a number of years, which position he held from the inauguration of the committee.

British Medical Agency of Queensland Proprietary Limited.

The inauguration of this agency took place on February 11, 1937, and, in order that financial reports may be submitted to the Council before the general meeting of the British Medical Association (Queensland Branch), it has been arranged that the books of the agency close yearly on September 30.

At the annual meeting of the agency, held on November 10, it was disclosed that there was a loss of £42 during the first seven and a half months' operation, but this figure does not include the saving effected by the agency on behalf of the British Medical Association (Queensland Branch) in respect to purchases during the period under review.

In addition to the services offered to members, the agency assisted materially in the work of moving from Adelaide Street to Wickham Terrace prior to, during and after such move.

The directors consider the result to date has fully warranted the formation of a business of this nature, which was established mainly to give service to members of the association and particularly to those residing in the country.

Letters received from both country and city members clearly indicate the appreciation of the services rendered and the directors are very pleased to acknowledge the support given by members.

It is expected that during the next twelve months the agency will show a profit, as more members will doubtless avail themselves of its services in the future.

Members are asked to consult the agency on the following matters: (i) sale and purchase of medical practices and partnerships, (ii) appointments of reliable *locum tenentes* and assistants, (iii) life and endowment assurance, (iv) all sickness and accident assurance, (v) fire and accident assurance, (vi) quotations for stationery and merchandise supplies, (vii) any other matters of whatsoever nature requiring attention.

Federal Council.

Two meetings of the Federal Council of the British Medical Association in Australia were held during the

QUEENSLAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION (INCORPORATED).

Balance Sheet as at November 15, 1937.

LIABILITIES.	£ s. d.	£ s. d.
British Medical Association, London—		
Balance Subscriptions Account	57 7 6	
Australasian Medical Publishing Company, Limited, Sydney	45 10 0	
English, Scottish and Australian Bank Limited, Brisbane—		
Overdraft—Building Fund Account	1,319 7 1	
Loan from Queensland Medical Land Investment Company, Limited	1,900 0 0	
Loans from members repayable May 15, 1943 £3,047 10 0		
Interest accrued to November 15, 1937 74 11 7		
	3,122 1 7	
Surplus from Dinners, Entertainments *et cetera*	31 17 2	
Sinking Fund	290 16 9	
Accumulation Account—		
Balance at November 1, 1936 £1,501 3 7		
Deduct—Revenue Account, Deficit twelve months ended November 15, 1937 75 19 4		
	1,425 4 3	
	£8,192 4 4	

ASSETS.	£ s. d.	£ s. d.
Freehold Property, "B.M.A. House", 225 Wickham Terrace, Brisbane (*less* Depreciation on Building to November 15, 1937)		2,900 0 0
B.M.A. Rooms, Wickham Terrace, Brisbane: Library, Book Cases, Furniture, Lantern, Typewriters *et cetera*		320 0 0
Museum Specimens		5 0 0
Queensland Medical Land Investment Company, Limited—		
5,750 shares of £1 each, paid to 10s. each—at cost		2,875 0 0
British Medical Agency of Queensland Proprietary, Limited—		
257 shares of £1 each, fully paid, at cost		257 0 0
Australasian Medical Publishing Company, Limited, Sydney—		
Two debentures of £25 each and one of £5		55 0 0
Sinking Fund Investments—		
Australian Consolidated Inscribed Stock, 3½%, 1951 (£280), at cost	£278 3 3	
Commonwealth Savings Bank, Brisbane — Credit Balance, Current Account	12 13 6	
		290 16 9
City Electric Light Company, Limited—Deposit Account		6 0 0
Unused Stationery Coupons		4 0 0
English, Scottish and Australian Bank, Limited, Brisbane — Credit Balance, General Fund Account		1,470 14 3
Cash in Hand		8 13 4
		£8,192 4 4

We have examined the above Balance Sheet and have obtained all the information and explanations we have required.

In our opinion the Balance Sheet is properly drawn up so as to exhibit a true and correct view of the state of the Association's affairs as at November 15, 1937, according to the best of our information and the explanations given us, and as shown by the books of the Association.

R. G. GROOM & Co.,
Chartered Accountants (Aust.),
Auditors.

(Signed) R. G. QUINN,
Hon. Treasurer.

Brisbane, November 22, 1937.

QUEENSLAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION (INCORPORATED).

Statement of Receipts and Payments (General Fund) for Twelve Months ended November 15, 1937.

RECEIPTS.

November 16, 1936.	£	s.	d.
To Credit Balance at English, Scottish and Australian Bank, Limited, Brisbane ..	1,812	5	6
„ Cash in hand	5	14	5
November 15, 1937.			
To Subscriptions—			
For remittance to British Medical Association, London £651 10 6			
For remittance to *The Medical Journal of Australia*, Sydney 513 15 0			
Queensland Branch Subscriptions 296 13 6			
Organization Fund, Queensland Branch 938 6 6			
	2,400	5	6
„ Rent from British Medical Association House, Wickham Terrace	18	0	0
„ Sundry Receipts	11	13	6
„ Australasian Medical Publishing Company, Limited—Interest on Debentures: £55 at 5% *per annum*, 12 months to June 30, 1937	2	15	0
	£4,250	13	11

PAYMENTS.

November 15, 1937.	£	s.	d.
By British Medical Association, London: Amounts remitted to London on account of subscriptions collected	664	5	6
„ Australasian Medical Publishing Company, Limited, Sydney: Amounts remitted to Sydney on account of *The Medical Journal of Australia* subscriptions collected	524	0	0
„ Library Expenditure	51	17	1
„ Furniture and Fittings	51	9	11
„ Book Cases	9	15	0
„ Branch Expenses—			
Salaries, Audit and Honoraria £367 6 3			
Printing and Stationery .. 32 6 9			
Electric Light 13 0 2			
Rent and Cleaning Adelaide Street Rooms 29 0 10			
Telephone 34 2 3			
Bank Charges 2 16 1			
Stamps and Telegrams .. 43 16 7			
Insurance: Fire and Workers' Unemployment and Compensation 5 6 1			
Repairs, Office Furnishings and Typewriters 6 4 2			
Council and General Meeting Expenses, Balopticon Operator, and Sundries .. 29 14 0			
Removal Expenses, Adelaide Street Rooms to British Medical Association House, Wickham Terrace 24 6 8			
	587	19	10
„ Payments on account of British Medical Association House, Wickham Terrace—			
Repairs, painting and lighting installation £237 13 9			
Cleaning 71 5 3			
Electric Light Deposit .. 6 0 0			
	314	19	0
„ Purchase of 620 shares paid to 10s. each in Queensland Medical Land Investment Company, Limited	310	0	0
„ Purchase of 257 shares of £1 each, fully paid, in British Medical Agency of Queensland Proprietary Limited	257	0	0
„ Credit Balance at English, Scottish and Australian Bank, Limited, Brisbane ..	1,470	14	3
„ Cash in hand	8	13	4
	£4,250	13	11

QUEENSLAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION (INCORPORATED).

Building Fund Statement of Receipts and Payments for Twelve Months ended November 15, 1937.

RECEIPTS.

November 15, 1937.	£	s.	d.
To Rent from British Medical Association House, Wickham Terrace	15	10	0
„ Queensland Medical Land Investment Company, Limited: Dividend, 12 months ended November 25, 1936	128	5	0
„ Sale of Building for removal	35	0	0
„ Loan from Queensland Medical Land Investment Company, Limited	1,900	0	0
„ Refund Fire Insurance premium	1	10	7
„ English, Scottish and Australian Bank, Limited, Brisbane: Debit Balance	1,319	7	1
	£3,399	12	8

PAYMENTS.

November 16, 1936.	£	s.	d.
By English, Scottish and Australian Bank, Limited, Brisbane: Debit Balance	1,100	16	11
November 15, 1937.			
By Rates, Land Tax, Insurance and Sundries, B.M.A. House, Wickham Terrace	132	7	8
„ Payments on account of interest	265	17	4
„ Bank Charges	0	10	9
„ Repayment of Members' Loans	1,900	0	0
	£3,399	12	8

QUEENSLAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION (INCORPORATED).

Revenue Account for Twelve Months ended November 15, 1937.

EXPENDITURE. November 15, 1937.	£ s. d.	£ s. d.
To Library Expenditure	51 17 1	
„ Branch Expenses	585 17 3	
„ Depreciation, Furniture, Bookcases, Fittings, Typewriters *et cetera*	26 4 11	
		663 19 3
„ Expenses, British Medical Association House—		
Rates, Land Tax, Insurance, Painting, Repairs and Sundries	363 5 10	
Cleaning	71 5 3	
Interest on Loans from Members	217 7 6	
Depreciation, Building	165 0 0	
	816 18 7	
Less Rents Received	33 10 0	
		783 8 7
		£1,447 7 10

INCOME. November 15, 1937.	£ s. d.	£ s. d.
By Branch and Organization Fund Subscriptions	1,235 17 6	
„ Queensland Medical Land Investment Company, Limited, Dividend	128 5 0	
„ Australasian Medical Publishing Company, Limited, Interest on Debentures	2 15 0	
„ Sundries	4 11 0	
		1,371 8 6
„ Accumulation Account— Deficit for year transferred		75 19 4
		£1,447 7 10

year, the first in Melbourne on January 28, 1937, and the second in Adelaide on August 19, 1937. Dr. T. A. Price was present at both meetings. As Dr. Gifford Croll was unable to attend either of the meetings, Dr. N. W. Markwell took his place. The proceedings of the meetings were published in THE MEDICAL JOURNAL OF AUSTRALIA.

The Council would like to record its appreciation of the valuable assistance rendered by Dr. J. G. Hunter, General Medical Secretary of the Federal Council, during his visit to Brisbane in April, and also in connexion with his tour of the northern coastal towns of Queensland in July in company with our President, Dr. T. A. Price.

Australasian Medical Congress (British Medical Association).

The Fifth Session of the Australasian Medical Congress (British Medical Association) took place in Adelaide from August 23 to 28, 1937. The Branch was officially represented by Dr. Alex. Murphy. Dr. Leslie Gibson acted as Honorary Branch Secretary for Queensland and the membership from this State was seventeen.

"The Medical Journal of Australia."

The Editor of THE MEDICAL JOURNAL OF AUSTRALIA, Dr. Mervyn Archdall, was present at the last annual meeting of the Branch, and in May he paid an official visit, when he attended a meeting of the Branch and also of the Council. A very hearty welcome was extended to Dr. Archdall.

"The British Medical Journal."

At the beginning of this year *The British Medical Journal* in a new form and cover was issued and the improvement is much appreciated.

A suggestion has been made for the supply of more Australian news for publication in *The British Medical Journal*, and it is hoped that in the near future a correspondent will be appointed who will be in a position to submit matters of interest.

Congratulations.

Letters of congratulation have been sent as follows: Dr. Alex. Murphy and Dr. Neville G. Sutton on their appointments respectively as Lecturers in Medicine and Surgery at the University of Queensland; Dr. Eustace Russell upon his election as a Fellow of the Royal College of Physicians of Edinburgh, who, it is understood, is the first Australian member to receive this diploma; Dr. N. A. Lawler, expressing appreciation of the aid rendered by him to the survivors of the Stinson air disaster; Dr. J. L. Simmonds, who received recognition by the Royal Humane Society of Australasia; and to Dr. A. Fryberg upon his appointment as State Medical Officer of Health.

Finance.

Although the balance sheet shows a deficit of £76, nearly £240 had to be expended in repairs and renovations to British Medical Association House in order to convert it for use as offices and meeting room.

In addition to this, we have increased our assets by the purchase of £310 of shares in the Queensland Medical Land Investment Company Limited and £257 in shares in the British Medical Agency of Queensland Proprietary Limited.

It might also be pointed out that fifty-one members have not yet paid their subscriptions for the current year, which represents a loss to the Branch funds for the year of over £100.

Social.

The President and members of the Council entertained the following guests at dinner at the Belle-Vue Hotel prior to the Bancroft Lecture on Friday, June 4: Sir C. Stanton Hicks, Mr. Wilfred Vickers, Dr. Douglas Thomas.

The medical bowlers are to be congratulated upon winning, for the second time, the cup presented by Messrs. Bosch, Barthel and Company for annual bowling rinks competition between the medical, dental and pharmaceutical professions.

(Signed) T. A. PRICE,
President.

FINANCIAL STATEMENTS.

The Honorary Treasurer presented the financial statements, which were taken as read on the motion of Dr. S. F. McDonald, seconded by Dr. Ernest Culpin; their adoption was moved by the Treasurer, Dr. R. G. Quinn, seconded by Dr. F. W. R. Lukin.

ELECTION OF OFFICE-BEARERS.

The President announced the result of the election of office-bearers and members of the Council.

President: Dr. R. G. Quinn.

President-Elect: Dr. Neville G. Sutton.

Past-President: Dr. T. A. Price.

Honorary Secretary: Dr. Horace W. Johnson.

Councillors: Dr. D. Gifford Croll, Dr. P. A. Earnshaw, Dr. Leslie Gibson, Dr. Noel M. Gutteridge, Dr. Basil L. Hart, Dr. Alan E. Lee, Dr. S. F. McDonald, Dr. H. S. McLelland, Dr. N. W. Markwell, Dr. Ellis Murphy, Dr. M. Graham Sutton, Dr. J. G. Wagner, Dr. C. E. Wassell, Professor H. J. Wilkinson.

On the motion of Dr. R. G. Quinn, seconded by Dr. W. N. Robertson, Dr. Roy G. Groom was appointed auditor.

Ethics Committee.

On the motion of Professor H. J. Wilkinson, seconded by Dr. W. N. Robertson, Dr. A. H. Marks, Dr. Mervyn Patterson, Dr. G. P. Dixon, Dr. Gavin Cameron and Dr. G. W. Macartney were appointed as members of the Ethics Committee.

Induction of President.

Dr. T. A. Price then inducted Dr. R. G. Quinn to the chair. Dr. Price said he introduced Dr. Quinn with very great pleasure, assured as he was of his earnestness and ability.

President's Address.

Dr. R. G. Quinn read his address (see page 1).

Votes of Thanks.

Dr. T. A. Price moved a vote of thanks to Dr. Quinn, which was carried by acclamation.

Dr. Quinn moved a vote of thanks to Mrs. Spooner, the lay secretary, which was carried by acclamation, and also to Dr. T. A. Price for the work he had done and the time he had given up to the affairs of the Branch.

VICTORIAN BRANCH NEWS.

The following items of news of particular interest to members of the Victorian Branch of the British Medical Association are published at the request of the Council of the Branch.

A Bill to Amend the Medical Act.

On October 20, 1937, the following "Bill to amend Section Fifteen of the Medical Act 1928" was introduced into the Legislative Assembly:

1. This Act may be cited as the Medical Act 1937 and shall be read and construed as one with Part 1 of the Medical Act 1928 (hereinafter called the Principal Act) and any Act amending the same which Acts and this Act may be cited together as the Medical Acts.

2. (1) At the end of section fifteen of the Principal Act there shall be inserted the following sub-section:

"(2) Any legally qualified medical practitioner who—

(a) demands payment from or renders an account to or collects fees from any person for or in respect of professional services rendered by any other legally qualified medical practitioner (excepting a partner under a partnership agreement approved and registered by the Board, a permanent assistant in the sole employment or a *locum tenens* of such first-mentioned legally qualified medical practitioner); or

(b) shares or agrees to share with any other legally qualified medical practitioner (except a partner under a partnership agreement approved and registered by the Board, a permanent assistant in the sole employment or a *locum tenens* of such first-mentioned legally qualified medical practitioner) any fee or other remuneration for or in respect of professional services rendered by such first-mentioned legally qualified medical practitioner—

shall be liable for a first offence to a penalty of not more than Fifty pounds and for any subsequent offence to a penalty of not less than Fifty pounds and not more than One hundred pounds."

(2) In section fifteen of the Principal Act the words "whether medical or surgical" are hereby repealed.

The motion for the second reading of the Bill was moved on October 28, and the following is extracted from Parliamentary Debates No. 2, Second Session, 1937, pages 200-201.

Mr. Bailey (Chief Secretary): The Bill is a small one to amend section 15 of the *Medical Act* 1928. Its object is to overcome a practice which has developed among some medical practitioners of rendering to patients accounts for treatment which include sums to be paid to other practitioners who have assisted in the treatment. The practice of one medical practitioner rendering an inclusive account for services by himself and other doctors is considered to be unfair and unjust to the patient, and contrary to the best interests of the medical profession. Complaints have been received from the public from time to time, and the Medical Board has requested that suitable legislation be enacted to prohibit the practice. Objection is taken by both the public and the profession to cases such as I shall now describe. A patient consults a physician as to his state of health, and the physician decides that a radiological examination is necessary. Should a surgical operation be decided upon, the physician arranges for a surgeon, an anæsthetist, and, if necessary, an assistant. Finally, the patient is presented with an account covering the whole of these services, and the physician divides the payment amongst the other medical men. It will be obvious that such a system is open to abuse, in that the patient is unaware of the fees payable to the respective doctors, and the doctors are unaware of the fees on their behalf included in the composite account. The Bill remedies the position by prohibiting a medical practitioner from demanding payment, rendering an account, or collecting fees for professional services rendered by other practitioners, and forbidding the sharing of fees with other doctors.

Clause 1 is the short title. Sub-clause (1) of clause 2 makes an addition to section 15 of the Principal Act, which empowers a legally qualified medical practitioner to sue for fees for his professional services. Paragraph (*a*) of sub-clause (2) of clause 2 makes it an offence for a medical practitioner to demand payment, or render an account, or collect fees, in respect of professional services rendered by any other medical practitioner, except a partner, assistant in his sole employment, or *locum tenens*. Paragraph (*b*) makes it an offence to share or agree to share with any other medical practitioner, except with a partner, assistant, or *locum tenens*, any fee or remuneration received for professional services. It will be noted that partnership agreements must be approved and registered by the Medical Board. This is to prevent the defence being raised that the doctors sharing fees are carrying on their profession in partnership.

The penalty for an offence against the provisions of the Bill is a fine of not more than £50 for the first offence and a fine of not less than £50 or more than £100 for a subsequent offence. Furthermore, a doctor convicted of such an offence would be liable to be dealt with by the Medical Board for infamous conduct in a professional respect, the penalty for which may be deregistration. Sub-clause (2) of clause 2 repeals the words "whether medical or surgical", for the reason that the services of a medical practitioner frequently include other professional services, such as pathological or radiological medical services. Instead of endeavouring to enumerate all types of medical services it is considered more convenient and satisfactory to refer only to "professional services" rendered by a legally qualified medical practitioner. This legislation has been recommended by the Medical Board, and I have pleasure in commending it to the favourable

consideration of honourable members. I hope that members of the Opposition will agree to the Bill being passed through all stages without delay.

Sir Stanley Argyle: I support the Bill. It is designed chiefly in the interests of patients, to prevent their exploitation as between general practitioners and specialists, or between general practitioners and surgeons or consultants. The abuses that are beginning to appear in this direction indicate that in some cases a general practitioner will call in a certain surgeon only on condition that the surgeon divides his fee for the operation with the general practitioner. The general practitioner does not do any work, but sends the patient to a particular surgeon or specialist.

Mr. Frost: And he receives a commission.

Sir Stanley Argyle: It is equivalent to a secret commission.

Mr. Kent Hughes: No Act of Parliament has yet stopped secret commissions.

Sir Stanley Argyle: No, but this Bill will prevent an account being rendered to a patient without its being specified definitely on the account where the money is going. The account must state that so much is for the man who did the work, so much for the physician who advised as to the previous and after treatment, and so much for the specialist.

Mr. Cremean: If secret commissions are paid after this it will be the patient's own fault.

Sir Stanley Argyle: Exactly! The patient will know to whom he is paying the money, and that will be as it should be. The principle contained in the Bill is, in my opinion, sound, and is in the best interests, not only of the profession, but also of the patients.

The motion was agreed to.

The Bill was read a second time, and passed through its remaining stages.

The Bill was introduced to the Legislative Council on November 3, 1937, when it was read a first time.

The motion for the second reading was moved on November 23, 1937, the Bill being finally passed on November 30.

The Legislative Council proceedings are recorded as follows in Parliamentary Debates Numbers 6 and 7, Second Session, 1937, pages 799-802 and pages 993-1001.

Sir John Harris (Minister of Public Instruction): I move:

That this Bill be now read a second time.

The Bill has been introduced by the Government on representations made by the Medical Board of Victoria. The Medical Board of Victoria is the registering authority and the disciplinary authority for the medical profession in this State. Representations were made to the appropriate Department by the Board that certain practices had been introduced in connexion with the rendering of accounts by medical men, and that certain malpractices were occurring. There were medical men who rendered a composite account for services by a number of medical men connected with a particular case, and it was stated that in the final result the money was not divided according to the value of the services rendered. I think, although this statement is not made in the notes supplied to me, that the practice was found to prevail to such an extent that the Board deregistered at least one practitioner. The Government thought that this was rather a serious thing. At the present day medical men work not only in partnerships, but also in teams. There may be a pathologist, a surgeon, an eye and ear doctor, and others specializing in the whole gamut of the human body, who are connected together in a team. In that sort of work it is possible to have irregularities. When I practised as a surgeon I employed assistants and anæsthetists. I always took the opportunity of paying them with my own cheque for the services they had rendered, and later attached their receipts to my account to the patient. That is the way I did my work, but I was practising on my own account, not in a team. It can be quite well understood that a practitioner who is doing today what I used to do will feel a little injured by the provisions of the Bill, because they will prevent him rendering a composite account. Every medical man who works in a team will be required to send in a separate account for his services. That will complicate medical accounts to some extent, but the Medical Board claims that when doctors and clients get used to sending and receiving separate accounts no one will feel under any disability, and separate accounts will become the general practice. To further inform honourable members of the objects of the Bill, I shall repeat the notes with which I have been supplied.

The object of the measure is to overcome a practice which has developed among some medical practitioners of rendering to patients accounts for treatment which include sums to be paid to other practitioners who have assisted in the treatment. The practice of one medical practitioner rendering an inclusive account for services by himself and other doctors is considered to be unfair and unjust to the patient and contrary to the best interests of the medical profession. Complaints have been received from the public from time to time and the Medical Board has requested that suitable legislation be enacted to prohibit the practice. Objection is taken by both the public and the profession to cases such as the following: A patient consults a physician as to his state of health and the physician decides that a radiological examination is necessary. Should a surgical operation be decided upon, the physician arranges for a surgeon, an anæsthetist and, if necessary, an assistant. Finally, the patient is presented with an account covering the whole of these services, and the physician divides the payment amongst the other medical men. It will be obvious that such a system is open to abuse in that the patient is unaware of the fees payable to the respective doctors, and some of them are unaware of the fees on their behalf included in the composite account.

The Bill remedies this position by prohibiting a medical practitioner from demanding payment, rendering an account or collecting fees for professional services rendered by other medical practitioners, and forbidding the sharing of fees with other doctors. Clause 1 is the short title. Sub-clause (1) of clause 2 adds a new sub-section to section 15 of the principal Act which empowers a legally qualified medical practitioner to sue for fees for his professional services. Paragraph (*a*) of the proposed new sub-section makes it an offence for a medical practitioner to demand payment or render an account or collect fees in respect of professional services rendered by any other medical practitioner, except a partner, assistant in his sole employment, or *locum tenens*. Paragraph (*b*) makes it an offence to share or agree to share with any other medical practitioner, except with a partner, assistant, or *locum tenens*, any fee or remuneration received for professional services.

It will be noted that partnership agreements must be approved and registered by the Medical Board. This is to prevent the defence being raised that the doctors sharing fees are carrying on their profession in partnership. The penalty for an offence against the provisions of the Bill is a fine of not more than £50 for a first offence, and a fine of not less than £50 or more than £100 for a subsequent offence. Furthermore, a doctor convicted of such an offence would be liable to be dealt with by the Medical Board for infamous conduct in a professional respect, the penalty for which may be deregistration. Sub-clause (2) repeals the word "whether medical or surgical", in section 15, for the reason that the services of a medical practitioner frequently include other professional services, such as pathological or radiological medical services. Instead of endeavouring to enumerate all types of medical services, it is considered more convenient and satisfactory to refer only to "professional services" rendered by a legally qualified medical practitioner. I had the Bill placed low on the Notice Paper because certain representations were made to me by the Victorian Branch of the British Medical Association. As the Bill was prepared by the Chief Secretary's Department, I referred the Branch to the Chief Secretary, who received a deputation from it, and the Bill was placed at the bottom of the Notice Paper in order that proper investigation might be made. I shall

read to the House the memorandum which was furnished to me by the Chief Secretary, giving a *résumé* of what occurred at the deputation of the Victorian Branch of the British Medical Association, which was the result of a full meeting of that branch. Then I shall read a letter which conveys the final decision of the Medical Board, which is the authority in connexion with the Bill, and which has given the Government certain advice. The memorandum from the Chief Secretary reads:

> On the 16th of November, 1937, representatives of the Victorian Branch of the British Medical Association (Professor Marshall Allan, president; Dr. F. K. Norris, honorary secretary; Dr. C. H. Dickson, medical secretary; and Dr. D. Roseby) waited on the Chief Secretary and urged that the Medical Bill at present before Parliament should be amended as follows:
>
> (1) That small accounts up to three guineas be exempted from the Bill.

To my knowledge, most of the fees that would be paid to assistants in this team work would not be much more than three guineas.

It was stated that this amendment would ensure the payment of small accounts of perhaps one guinea for pathological and other services, and would obviate a problem which would otherwise face the practitioners concerned in obtaining settlement of these small accounts.

That is one of the means which might be employed. Having been a general practitioner, I have some knowledge of this matter. Suppose I were engaged to go to Frankston to assist a doctor with his patient. Under the terms of the Bill I would be compelled to render a separate account to the patient for that service. I might get paid, and I might not. I know from experience that, while a doctor can collect fees from his own clientele, very frequently he does not obtain his fees from outside patients. It occurs to me, on the one hand, that the amount of three guineas might be too high an exemption, and yet if it were reduced, say, to two guineas the fees of the two doctors might be three guineas, and the medical practitioner so engaged in the instance I have given would require to render a separate account to the other doctor's patient. I shall proceed to quote from the memorandum:

> (2) That the term "locum tenens" should include a substitute called in by a doctor who is temporarily unavailable. It was pointed out that frequently when a doctor was engaged at an operation or when he was absent for a day or two, an urgent case occurred for which another doctor had to be called in. Such relieving doctor would not be covered by the generally accepted meaning of "locum tenens", and therefore, under the Bill as now drafted, he would have to collect perhaps one small account for the man for whom he was the substitute.
>
> (3) That the exemption for permanent assistants should also cover certain other doctors. The deputation stated that a number of group medical practices were growing up around Melbourne, to some of which pathologists and specialists were attached, although not wholly employed by the one group. Under this system one man might be pathologist to two groups in different suburbs, and also hold a paid appointment at a public hospital, and as in none of these positions he could be regarded as a full-time assistant, there would be definite difficulties for him under the Bill as drafted.
>
> (4) That any reference to registration or approval of partnerships should be deleted from the Bill. It was stated that it was questionable whether partnerships existing between medical men should have to be disclosed to the Medical Board. In the case of a prosecution the onus would be on the defendant to prove that he was a member of a partnership, and the existence of a partnership could be proved by reference to the official taxation and partnership records.

The Chief Secretary promised to give consideration to the representations of the deputation.

Subsequently the Chief Secretary, after consultation with the Medical Board, received the following letter, dated the 20th of November, from the Secretary of that Board:

> Last Thursday a deputation from the medical profession placed before the Medical Board certain modifications of the amending medical Bill now before Parliament, which had been proposed at a meeting of the Victorian Branch of the British Medical Association. After carefully considering the representations made by the deputation, the Board, at a meeting held yesterday, resolved that the Bill should be proceeded with in its present form.
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> The deputation urged that the Bill be modified in the following directions, either by amendment or the addition of provisions whereby exemptions could be granted in particular cases:
>
> (1) Exemption of a fee not exceeding £3 3s.
>
> (2) That the term "locum tenens" should be extended to include a temporary substitute.
>
> (3) Extension of relief from the provisions of the Bill to assistants who are not employed solely by one partnership or institution.
>
> (4) Deletion of the requirement that partnerships shall be approved and registered by the Medical Board. Doubt was expressed as to whether registration of partnerships could be considered to be a legitimate function of the Board.
>
> The Board felt that objections to the Bill had arisen from misunderstanding of its provisions and that they will evaporate when the benefits of the measure have been experienced. With a view to informing members of the profession upon the contents of the Act when it is passed, the Board is desirous of printing and distributing to each registered practitioner an explanatory memorandum, and I have been directed to request the approval of the Chief Secretary to the taking of this action.

The Medical Board says that if the Bill is passed it will merely be necessary to send an explanatory memorandum to all medical practitioners. I have given honourable members a complete *résumé* of the objections of the British Medical Association to the Bill and the answer to those objections by the Medical Board. I have also submitted to the House a *résumé* of the contents of the Bill. I think it would be wise if honourable members accepted my explanation of the measure as it will appear in *Hansard*. I am agreeable to the debate being adjourned in order that they may be able to give due consideration to both sides of the case, and come prepared, if they wish, to submit any suggestions with respect to the measure. The Government has decided to accept the advice of the Medical Board and to proceed with the Bill as submitted to the House. I shall be glad if the unofficial Leader will move that the debate be adjourned.

The Honourable C. H. A. Eager (East Yarra Province): I move:

> That the debate be now adjourned.

I know certain honourable members are very anxious to prepare themselves for a discussion of the Bill and, in the circumstances, I think it would be as well to adjourn the debate until Tuesday next.

Sir John Harris: I will agree to that.

The motion for the adjournment of the debate was agreed to, and the debate was adjourned until Tuesday, November 30.

The debate for the second reading of this Bill was resumed.

The Honourable C. H. A. Eager (East Yarra Province): This Bill is very simple in its statement, and, I think, very clear. It deals with what appears at first sight to be a very small matter. But it is one of very considerable concern to that great profession, the medical profession, and many and diverse views have been expressed on the object of the Bill by members of that profession. In the first place I think we should look at the Bill in this light—that in no way is it an attempt to cast any slur on this high profession, nor does it, in fact, do so. But into this profession, as unfortunately into every other profession and vocation, there enter at times men whose conduct is

not strictly ethical and sometimes is not quite honest. It has been found in the medical profession that abuse has crept in, in a small number of cases, in connexion with the rendering of accounts for fees where two or three medical practitioners have performed services for a patient. That being so, as I understand the position, Parliament has been asked to render those improper practices less easy of fulfilment. Of course, no Bill that we might pass could prevent anyone who set out deliberately to be unethical or dishonest from being so, but Parliament can place obstacles in the way, and the Bill is an attempt to do that. Ordinary practitioners, honest and ethical, comprising, I suppose, at least 99 per cent. of the medical profession, have nothing to fear from the Bill. It is not aimed at them at all. It may create a little further work for members of the profession; it may hinder some of them in the collection of their fees; it may mean that those who work in collaboration will be prevented from proceeding in the simple way that they have done in the past in relation to a composite bill. In referring to members of the profession acting in collaboration, I have in mind the association of a surgeon, or a general practitioner, with his anæsthetist, with or without a pathologist. Hitherto the practice has been for, say, the general practitioner to collect the bill and distribute the amounts due to the participating practitioners. If the Bill will prevent that easy way of proceeding it will at the same time prevent some abuse that has arisen from the practice of collecting the composite fee.

The Bill provides that no legally qualified medical practitioner shall demand payment from or render an account to or collect fees from any person for or in respect of professional services rendered by any legally qualified medical practitioner other than himself. There are one or two exceptions to that provision to which I may refer presently. There seems to be nothing essentially wrong with the provision. There is nothing intrinsically wrong, however, in doing the thing that is sought to be prohibited. In the legal profession it is the practice for a solicitor to render an account for his own fees and the fees of counsel, whom the solicitor pays, sometimes before and sometimes after—generally after—collecting from the client. That has not been found to lead to any abuses. In the medical profession, however, the system has been found to lead to some abuse. The Bill should receive support from honourable members because the Medical Board of Victoria has approved of it. The Victorian Branch of the British Medical Association, on the other hand, at first seemed to be hostile to the Bill. What its present attitude is does not clearly appear, except that it seems to me that some of those points which it criticized in the first instance it afterwards felt were not open to the hostile criticism it had put upon them.

Sir John Harris: I think the Victorian Branch of the British Medical Association withdrew its opposition.

The Honourable C. H. A. Eager: From what I can gather, the Victorian Branch of the Association, as the guardian, in a sense, of the medical practitioners in Victoria, is, at any rate, not now expressing its dissatisfaction with the Bill—if it is dissatisfied.

The Honourable M. Saltau: Did that body withdraw the suggestion that it made with respect to the Bill?

The Honourable C. H. A. Eager: I think that has been left in a certain amount of doubt. The Association simply seems to have withdrawn from the view it originally expressed.

Sir John Harris: The Chief Secretary informed me that it had withdrawn.

The Honourable C. H. A. Eager: I know that many individual medical practitioners, chiefly composed of general practitioners in the metropolitan area, are still personally opposed to the Bill.

The Honourable W. J. Beckett: You can understand their point of view, of course.

The Honourable C. H. A. Eager: Yes, I think I can. Some of the general practitioners take the view that the Bill is an attack on the system, and on the probity of men who have conducted the system in the past.

The Honourable J. M. Balfour: Was there not a letter from the secretary of the Victorian Branch of the British Medical Association, published in the Press, on the subject?

The Honourable C. H. A. Eager: I think there was.

Sir John Harris: I think that the Victorian Branch of the British Medical Association as a body was opposed to the Bill. It asked that it should be amended, but it has not forwarded a proposed amendment.

The Honourable C. H. A. Eager: Some general medical practitioners have been opposed to the Bill because they thought it constituted an unwarranted attack on the way in which they were carrying on their business, and that it was a reflection on themselves; but I do not think it is, or that that was intended. It may be said that every enactment of a restrictive character is in a sense an interference with the carrying on of a business or profession. Yet we recognize that, for the sake of the community generally, we must put a limitation on the freedom of individuals. I do not think the medical profession, when it settles down to this proposed legislation, will find that any very great inconvenience has been imposed on it. It has been suggested that the Bill might be loosened up a bit by providing proper safeguards for the collection of a composite set of fees, which could be inserted in the Bill in some way. It has been pointed out that at times it would be extremely inconvenient, perhaps both to the practitioner and to the patient, for each practitioner concerned to send in a separate account. For example, let us consider a small fee of two or three guineas due to an anæsthetist. Quite properly, of course, many eminent surgeons work habitually with certain anæsthetists. It might be a little bit awkward for the anæsthetist to render his own account to each patient, whom as often as not he does not personally know, and who does not know him. Perhaps the surgeon could render the account of his anæsthetist with his own account. The Bill, however, would not permit that. There is a good deal to be said for a qualification at this point, although I do not propose to advance anything in the nature of an amendment.

We may consider also the case of a pathologist. He examines portion of the blood, skin, or an organ of the human body for a practitioner. Ordinarily, I suppose, he is paid his fee by the surgeon or other practitioner. The question has been asked: "Is there any need for the pathologist to render his separate account to the patient?" From the point of view of the patient, it may be said that by the time he has received all of the various accounts of the practitioners and consultants concerned he will not know when his costs have come to an end or exactly where he stands, whereas it would be very easy for him to receive all the accounts in one. The Leader of the House has explained the Bill very fully. We have had it on his high authority that in the past the practice of rendering composite accounts in the way he explained has been carried on and no question has ever arisen. That method has been for the practitioner primarily concerned to pay the other practitioners and to send along his receipts together with his own account, asking the patient for a cheque to cover the whole sum. That is open to little or no abuse. However, the propounders of the Bill appear to have considered that the method is open to abuse by some unscrupulous persons. The retort to that is that nothing we can do can prevent the carrying out of unscrupulous practices. The Bill contains nothing that is seriously wrong even in requiring separate accounts to be rendered. Had the Bill been drawn in the first instance to provide that a composite account might be rendered together with the receipts for the payment of fees of other practitioners than the medical practitioner rendering the account, that would have been safe enough. I repeat, however, that the Bill has not been so drawn. I think we must take a great deal of notice of the Minister—Sir John Harris, Doctor of Medicine. With a thorough understanding of these matters, he advises the House to pass the Bill, and I think the measure is reasonably safe. I repeat again, even at the risk of saying it once too often, that in my opinion the

Bill is in no sense an attack upon the medical profession, and cannot be construed as such.

The Honourable P. P. Inchbold (North-Eastern Province): In rising to support the Bill, I must express regret that it does not protect the public to the degree to which I think the public is entitled to protection under legislation of this sort. The measure sets out to correct certain abuses, and I hope that it will have the desired effect, but I feel that the time is ripe for the Government, having regard to its duty towards the public, to place some form of control over fees charged by medical men for professional services. In the legal profession certain charges are definitely laid down by law, but there has, unfortunately, grown up in this State a practice of permitting a medical man to get what he can for the treatment of patients, with the result that a great many people are afraid to seek medical advice when they really need it. This practice has also had the effect of causing numbers of people in need of medical treatment to take advantage of that available at public institutions, when they really should bear the cost involved themselves. I feel that in that respect the Bill is only half a Bill. I had hoped that the Government, in preparing this legislation, would also take into consideration the facts to which I have referred. We owe a great deal to medical science, but it appears to me that there exists a practice among medical men to work together too much in dealing with trivial cases. Let me instance a small thing such as a fractured arm. A man who suffers an injury of this sort perhaps goes to a medical practitioner with what he thinks is either a severe sprain or a fracture of the wrist. The medical man looks wise and says: "I am not sure what it is. You had better have it X rayed." The patient follows this advice, and subsequently is told that he is suffering from either a fracture or a sprain, as the case may be.

Sir John Harris: What! After an X ray?

The Honourable P. P. Inchbold: Yes, that is what happens today, as the Minister knows.

Sir John Harris: I do not know that I do.

The Honourable P. P. Inchbold: If the trouble is diagnosed as a definite fracture, the doctor says, "You must have a special kind of splint", and, after the splint is removed, he says the arm must be massaged. The old type of medical practitioner, in treating such a case, would have put the damaged arm in a splint and sent the patient home again, and charged £2 2s. or £3 3s.

The Honourable G. S. McArthur: Either making or marring the arm.

The Honourable P. P. Inchbold: Very often he made it. A person meeting with such an injury today often has about four sets of fees to pay, and a small injury that a few years ago might have involved him in an expense of two or three guineas now involves him in a cost of about twenty guineas.

Sir John Harris: But a medical practitioner is open to a charge of malpractice if he orders treatment that is not warranted.

The Honourable P. P. Inchbold: That sort of thing causes people to seek treatment at public institutions instead of carrying the small burden that would be entailed under the old system of charging for medical attention. I hoped that the Government would go into this matter carefully with a view to affording the public the necessary protection. I trust that in the near future the Government will take action to relieve people seeking medical advice of the onerous charges placed upon them by a great many specialists. I believe that members of the profession should be well reimbursed for the work they perform, but there must be a value to the services rendered by any professional man, and that value should be ascertained and set down by Parliament, so that members of the public who seek medical and dental treatment will receive value for their money.

The Honourable J. M. Balfour (Gippsland Province): The Government is to be congratulated upon introducing this Bill. For the last ten years leaders of the medical profession have endeavoured to get legislation of this character submitted to Parliament, and the Government is to be commended upon giving Parliament an opportunity of dealing with this very important matter. Referring to the remarks of the unofficial Leader, I would point to the fact that the secretary of the Victorian Branch of the British Medical Association, in a letter to the Press, stated that the Bill was acceptable to the Branch. That should remove what otherwise might be a great objection in the minds of honourable members to the passage of the Bill. When the Leader of the House was explaining the Bill, an honourable member suggested that accounts up to about £3 3s. might be excluded from its provisions, but it is felt that such an exclusion would be a direct blow to the principles involved in the Bill. The difficulties encountered in collecting these accounts can be overcome. I understand that the practice in Sydney is for each doctor attending a particular patient to render his own account, and a radiologist obtains payment of his fee quite apart from any other medical fees. I repeat that the Government is to be congratulated upon bringing this matter forward, although it relates to only one section of the principal Act. If Mr. Inchbold is desirous of proceeding further with what he has in mind, that is a different matter altogether.

The Honourable M. Saltau (Western Province): I am one of those who think that it is very regrettable that it should be necessary to apply to a profession such as the medical profession legislation of this kind. I would point out, particularly in reply to Mr. Inchbold's comments, that there is in existence a fixed scale of fees chargeable for the treatment of what are known as intermediate cases in practically all base hospitals and in a good many other hospitals also. If that practice were carried a step further, it would bring into the medical profession a degree of nationalization which would at once be the subject of strong complaints by members of the profession. I do not think we could do much in that direction.

The Honourable P. P. Inchbold: Do you not think the high fees charged are forcing us towards nationalization of the medical profession?

The Honourable M. Saltau: In many cases medical men render their accounts on the basis of the ability of the patient to pay.

The Honourable W. J. Beckett: That is the trouble.

The Honourable M. Saltau: In that way members of the profession obtain a certain return in respect of thousands of cases treated by them from which they look for neither fee nor reward. In my daily life I am surrounded by medical men, and I think that is the dominating idea in their minds. There is, however, some merit in the suggestion that an alteration is necessary with respect to fees collected on behalf of anæsthetists and other assistants. The Leader of the House referred to the practice that existed when he followed his profession and which is still followed by many medical men. It is convenient for these assistants to regard the doctor who seeks their services as responsible for collection of their fee. Usually there is a settlement among these men once every three months or every six months. I do not propose to seek to amend the Bill to permit of that still being done, although it was one of the suggestions made to the Chief Secretary, who, I understand, rejected them all.

Sir John Harris: I think the secretary of the Victorian Branch of the British Medical Association, as mentioned by Mr. Balfour, withdrew all opposition to the Bill. That is my instruction.

The Honourable M. Saltau: I have received several telephone messages suggesting that this arrangement between doctors should still be permitted in the cases to which I have referred, but although I have a good deal of sympathy with the suggestion, I am not prepared to take any action.

Sir Alan Currie (Nelson Province): In rising to support the Bill, may I say that I have received communications relating to it from leading physicians and surgeons in Melbourne, and the general expression of opinion is that by the passage of this legislation the public will receive a fair deal, and that the treatment of patients will be more thorough. Mr. Saltau referred to a scale of fees

laid down by the Charities Board in connexion with the treatment of patients at intermediate hospitals. As a matter of fact, I have had a good deal to do with that sort of thing in connexion with claims made by workers under the *Workers' Compensation Act*. Under that Act, an employer is bound to pay a certain allowance to cover loss of employment during the period of incapacity of any employee who may have been injured in his service. He is also bound to pay a sum of £10 to meet ambulance, medical, and hospital expenses. That allowance was raised some time ago from £5 to £10, but it is found that after the ambulance fee—only a small item—has been paid, the claim for medical attention has absorbed the whole of the balance, leaving nothing at all with which to recompense the hospitals in respect of treatment provided. I was rather surprised at a remark which was made by Mr. Saltau, who is a member of the Charities Board, that charges are made by the medical profession in accordance with the ability of the patient to pay. The scale of fees prepared by the Charities Board has been well considered, and is a reasonable scale. I do not desire to criticize the policy of the Charities Board in endeavouring to introduce a contributory system in connexion with the public hospitals, and to place patients in the intermediate wards provided that they are able to pay the fees. I think that probably patients would benefit materially by being put in that position, and they would probably receive better attention. Certainly the fees are high, and higher than would be allowed under the terms of the *Workers' Compensation Act*. It has been found that for the treatment of patients in the intermediate wards, accounts rendered for medical services have in some cases been excessive, and it has been necessary for people to refuse to pay them, and in some cases the fees have been reduced by 50 per cent. That has been done because it has been found that the fees were more than the patient could afford to pay. In some cases reduced fees have been accepted by the doctors.

I shall quote one case, and the Leader of the House will, I am sure, agree with me that the doctor's fee charged was excessive and unfair. The case was that of a lad who was injured when carrying on his work as a jockey. He suffered a fracture of the tibia, which, I understand, is the shin bone. Because the earnings of this lad were more than £400 *per annum*, he was debarred from coming under the terms of the *Workers' Compensation Act*. The account rendered to him for the operation of setting his leg was £168. In addition, he was charged £69 15s. for hospital fees. The actual fee charged by the surgeon for setting his leg was far in excess of the scale of fees laid down by the Charities Board. The amount set down in the scale prepared by the Charities Board for such an operation is fifteen guineas. I asked a leading surgeon what would have been a fair charge for the operation, and I was informed that thirty guineas would have been a fair charge.

Sir John Harris: I should have liked to have got thirty guineas for every broken leg I set.

Sir Alan Currie: That case and others show that there is good reason for the passing of this Bill.

The Honourable E. L. Kiernan: Will the Bill affect the charges made by medical men?

Sir Alan Currie: The Leader of the House in moving the second reading stated that the *Medical Act* contained provisions which discipline the profession. I have examined the *Medical Act*, and I cannot find in it any provision by which a person who is charged an excessive fee can obtain redress.

Sir John Harris: The provision relating to infamous conduct would cover it.

Sir Alan Currie: It is the general opinion of the leading men in the medical profession that the enactment of the measure is necessary, and that it will tend to give the public a fair deal. Therefore, I hope that the Bill will be passed without amendment.

The motion was agreed to.

The Bill was read a second time and committed.

Clause 1 was agreed to.

Clause 2 (Legally qualified medical practitioners not to demand payment or render accounts or collect fees for professional services rendered by other medical practitioners nor to share or agree to share fees with other medical practitioners).

The Honourable C. H. A. Eager (East Yarra Province): It seems to me that the Bill does not touch in any way the question of infamous conduct. The only conduct dealt with is the rendering of accounts and the collection of fees. As to what is infamous conduct, I do not think that any member should be under the misapprehension that the Bill is going to help in that direction. "Infamous conduct in a professional respect" is a term used in the *Medical Act* of Victoria, and it has been taken from the English *Medical Act* of 1858. The expression has been before the courts for judicial interpretation, and I should think that if a medical man merely charges an excessive fee, that is not infamous conduct. If a doctor said that he was going to pay a fee to another medical man and obtained money from a patient on that ground, and did not pay the money to the other medical man, he would be obtaining money under false pretences, and that might be infamous conduct. In one English case the following statement was adopted:

> If it is shown that a medical man, in the pursuit of his profession, has done something in regard to it which would be reasonably regarded as disgraceful or dishonourable by his professional brethren of good repute and competency, then it is open to the General Medical Council to say that he has been guilty of infamous conduct in a professional respect.

In the case in 1930 of *Rex against the General Medical Council*, Law Reports, King's Bench Division, at page 569, Lord Justice Scrutton said:

> The phrase [infamous conduct] means no more than serious misconduct judged according to the rules, written or unwritten, governing the profession.

I do not think that there is serious misconduct in merely claiming a fee which according to some people's notions is too high. The medical profession, like the legal profession and other professions, has not a monopoly, and if one goes to certain men one can expect to be asked to pay a high fee.

The Honourable W. J. Beckett: The trouble is that you do not know until afterwards whether the fee is going to be twenty guineas or two hundred guineas.

The Honourable C. H. A. Eager: A prudent person can, and should, ascertain first what the fee is to be. A prudent person does not go to his solicitor and give him *carte blanche* to obtain the opinion of an eminent member of the Bar. Rather, he asks what that opinion will cost, and if the solicitor states a fee which the client thinks is high, the solicitor will advise that the opinion can be obtained from, say, a member of the junior Bar. If a prudent person goes to a leading surgeon, who has a high standing in the profession and the reputation of being constantly engaged on cases of great importance, he must know that a much higher fee will be asked than if he consulted a surgeon who was just beginning to make his way. It is all a question of supply and demand. "Infamous conduct" means something far more than charging a fee which is a high fee or an excessive one. The Medical Board of Victoria has jurisdiction in cases of infamous conduct.

The Honourable J. P. Jones: This Bill will give it further jurisdiction.

Sir John Harris: If the Medical Board finds that any infamous conduct has occurred, it has power to deregister the doctor concerned.

The Honourable C. H. A. Eager: If a doctor consistently disobeyed the provisions of the Bill and did certain things, it would probably be said that he was guilty of infamous conduct in disobeying the law, but I would not express a definite opinion on that point. The Bill may prevent medical men from carrying on a clinic in at least one of the industrial suburbs. Two or three medical men work in a kind of partnership. Each of them is a specialist,

and the partnership employs in the relationship of master and servant another medical practitioner to do certain work. There is no legal objection to a medical man saying to another one: "I will work for you for £600 a year." If this Bill is passed it will prevent that kind of professional practice from being carried on in industrial suburbs. I have received a letter on behalf of one such institute which rightly points out that if the Bill becomes law it will have to change the method by which it does business. The institute says that this is an excellent way of doing business. Moderate fees are charged, and the patients get the advice of experts. This legislation would put a stop to that work, and it would not allow two or three medical practitioners carrying on a partnership to engage another doctor as a whole-time employee to do medical service.

Sir John Harris: I think your statement is incorrect.

The Honourable C. H. A. Eager: I do not know what the view of the Victorian medical profession is on that practice, about which there is nothing unethical.

The Honourable W. J. Beckett: Where is the institute of which you spoke?

The Honourable C. H. A. Eager: It is in Footscray. I can show the honourable member a letter that I have received. I mention that fact for the consideration of honourable members. It seems to me that the Bill would have to be radically amended to provide exemption for such an institute. If the measure were altered, however, it might allow improper practices to take place, and one must beware of altering a carefully drafted Bill such as this is.

Sir John Harris (Minister of Public Instruction): I hope the Committee will not agree to any alteration of the Bill, which has been introduced at the request of the Medical Board of Victoria on account of methods that have been introduced into the medical profession in recent times, and that have militated not only against the interests of the general public, but also against the interests of the profession. It is unethical for medical men to undercut the fees charged for doing certain work. Any doctor who enters into a contract to do, say, surgical work in a partnership or with another practitioner, is doing something that is unethical. The medical profession has a code of ethics, and if such a thing were done that code would be broken. Such action is prejudicial to the surgeon or other specialist who is endeavouring to obey the standard of ethics. I have been opposed to contract work in the medical profession—even to the contract work of lodges. I believe that every medical man likes to do charitable work, but he should get credit for it.

The Honourable J. M. Balfour: You would not call friendly societies' work charitable work?

Sir John Harris: Medical work done for friendly societies is contract work. From the first three years I began to practise I took up the position that if I was going to do charitable work I should get credit for it. During all my career as a practitioner I gave to the community at least £400 worth of work a year, and I got credit for doing it. The people I attended in that way might otherwise have gone on to a lodge, and would have come to me and would have reckoned that they had paid me for that work. I made 220 visits to one patient for £1 1s. a year. He was a sufferer from miners' phthisis and was in a very bad way, and I had to see him daily as long as he lived. I did that for £1 1s. a year. That is the kind of experience that makes medical men sore.

The Honourable J. P. Jones: A few more visits and the charge would have been equal to one penny a visit.

Sir John Harris: Yes. It is sometimes said that a lodge has 1,000 patients, and that a doctor who is attending them makes £1,000 a year. That is an argument in one direction, but it is forgotten that a medical man is a human being and can perform only a certain amount of work in twenty-four hours. If a doctor set out to attend to 1,000 patients and had to visit them, as I have visited some, he would be busy for the full twenty-four hours. I am stonewalling my Bill, but I wished to say something about medical ethics.

The Honourable E. L. Kiernan (Melbourne North Province): I do not think the Bill will be wide enough to cover cases of medical men making outrageous charges. I do not say that 99 per cent. of the medical profession would do such a thing.

Sir John Harris: I intended to mention that.

The Honourable E. L. Kiernan: There are members of the medical profession who would do something that is not right and fair, and it seems that the Bill does not cover them. From the remarks of the unofficial Leader, I take it that one of the results of the passing of the Bill would be that the medical profession would be able to institute proceedings against a doctor who charged too little or who undertook contract work.

Sir John Harris: No.

The Honourable E. L. Kiernan: I doubt very much whether the medical profession would take action against any doctor for having charged too much. Doctors are very much like lawyers. There is a story told of Mr. Aspinall, K.C., a great barrister in the old days, who was charged with unprofessional conduct in that he charged too low a fee to an unfortunate person who had got into trouble. The barrister replied: "Well, I took every copper the poor beggar possessed, and if that is not professional conduct, I do not know what is." I am afraid that if the Bill were left as it is, that might be the attitude of the British Medical Association.

Sir John Harris: It is not the British Medical Association; it is the Medical Board that sought the Bill.

The Honourable E. L. Kiernan: The Board would be subconsciously looking for doctors who cut the fees, and it would not be so active in dealing with practitioners who disgraced the profession by making outrageous charges. Recent court proceedings have brought to light such cases. I believe that most members of the profession are anxious to stop anything that would lower its tone or that departs from its high standards of ethics. If the Bill does not protect poor people, it is the duty of Parliament to go further and to provide a method of dealing with practitioners who make outrageous charges.

The Honourable J. P. Jones: Patients who are called upon to pay outrageous fees can go to law.

The Honourable P. P. Inchbold: And they frequently fall into the hands of another profession.

The Honourable E. L. Kiernan: I hope that the Government will see that the medical profession's ethics concerning charges are maintained, not only in regard to cut rates, but also in regard to outrageous charges made by any unscrupulous practitioner who may have got into the profession.

Sir John Harris (Minister of Public Instruction): I should like to enlarge on a couple of points. The British Medical Association has a scale of minimum and maximum fees. I think that anyone who is being treated can get a copy of the fees from the Association, and he can protect himself against being overcharged in such a way as was mentioned by Sir Alan Currie this evening. If the man mentioned by the honourable member had obtained a copy of the charges for various treatments, he could have prevented himself from being mulct in the payment of £168. I also wish to speak on the subject of infamous conduct. This little Bill has really been drafted to prevent medical men from doing things which I believe would be regarded by the Medical Board as infamous—that is, sending a composite bill and charging incorrect fees for work done, with the object of obtaining extra money from the patient. That has been done, and I am not certain that the Medical Board has not already deregistered one man for having done it. The Bill will give the Medical Board power to deal with doctors who do that sort of thing.

The Honourable G. L. Chandler (Southern Province): I have had representations made to me by a number of medical practitioners in opposition to the Bill. I would ask, what is wrong with a doctor submitting an itemized account on behalf of himself and other medical men, provided the account specifies correctly where the money is to go?

Sir John Harris: That would open the door to a practice that we desire to prevent. There are some practitioners who use that method with the object of increasing the size of the account and putting the money in their own pockets. If the account was itemized correctly, and the money was distributed correctly, it would be all right, but some practitioners are not doing that.

The Honourable G. L. Chandler: If what the Minister suggests were made compulsory, would that not overcome the difficulty?

Sir John Harris: No; I think it is compulsory now, in a way.

The Honourable G. L. Chandler: I am led to believe it is not.

The Honourable G. S. McArthur (South-Western Province): When I find the Government submitting a Bill that I consider good I support it. Occasionally I find a Bill that I cannot support. When I read the present Bill I know exactly what it is aimed at. I compliment the Leader of the House on the mild language he used to describe the practice that the Bill prohibits. The Bill is aimed at what is commonly known in law as conspiracy, or the taking of secret commissions, or fee splitting. The best men in the medical profession deplore fee splitting, which means that the patient does not obtain the best possible services for his or her money. Certain practitioners recommend a surgeon or other specialist only if he is willing to split his fee. Members have discussed the Bill very politely, and no one has used the phrase "fee splitting" to describe a practice which has crept into medical work in Victoria. The Bill will assist the Medical Board to combat that evil, which is against the best ethics of the profession and the best interests of the patient. I shall vote for the Bill without amendment. I particularly commend clause 2, which is really the Bill.

The Honourable J. H. Lienhop: Supposing a patient makes a contract with two medical practitioners, would he not be acting legally under the law of contract?

The Honourable G. S. McArthur: Of course he would.

The Honourable J. H. Lienhop: Then where does the conspiracy exist?

The Honourable G. S. McArthur: I am talking generally. We know what the Bill is aimed at, and I am not going to enter into a controversy concerning particular cases, which are not dealt with in the Bill. Particular contracts do not affect the Bill.

The Honourable A. J. Pittard (Ballarat Province): I do not oppose the Bill, but I can see no harm in the procedure that the Minister of Public Instruction adopted when he was a practising doctor. He said that he paid other doctors with his own cheques and attached their receipts to the accounts he sent to his patients. That would dispel any suspicion that the charges were exorbitant. There is one feature of the Bill that has not been referred to, and if I were a medical man I would look upon it with a certain amount of disfavour. The procedure laid down will bring a patient into close association with another medical man, and that, I should think, the first medical man would wish to prevent. If a further sickness occurred, the patient might transfer his affection to the other doctor. There is clearly an element of danger to the first medical man. I suppose it would result in the first doctor being particularly painstaking to see that the patient held him in high favour.

The Honourable J. M. Balfour (Gippsland Province): I understand that the principle of the Bill is that one medical man must not handle another medical man's fee. The composite fee has been used as a cloak for fee splitting. A doctor could collect correctly all the fees on a properly itemized account, but he need not disburse them as itemized. For those reasons I support the Bill.

The clause was agreed to.

The Bill was reported to the House without amendment, and passed through its remaining stages.

The Act was proclaimed in the *Government Gazette* on December 8, 1937, and has been in force since that date.

NOMINATIONS AND ELECTIONS.

THE undermentioned has applied for election as a member of the New South Wales Branch of the British Medical Association:

Bowen-Thomas, Glynn, M.B., B.S., 1935 (Univ. Sydney), 47, Powell Street, Killara.

The undermentioned has been elected a member of the New South Wales Branch of the British Medical Association:

Baillie-Newton, Pauline, M.B., B.S., 1935 (Univ. Sydney), 84, Muston Street, Mosman.

The undermentioned have applied for election as members of the South Australian Branch of the British Medical Association:

Bonnin, Josiah Mark, M.B., B.S., 1936 (Univ. Adelaide), Adelaide Hospital, Adelaide.

McLarty, Thomas Leslie, M.B., B.S., 1935 (Univ. Adelaide), North Terrace, Adelaide.

The undermentioned have been elected members of the South Australian Branch of the British Medical Association:

Hunwick, D. A. J., L.R.C.P., M.R.C.S., 1933 (London), Port Lincoln.

Bonnin, Noel James, M.B., B.S., 1932 (Univ. Adelaide), Adelaide Hospital, Adelaide.

The undermentioned have been elected members of the Victorian Branch of the British Medical Association:

Hughes, Wilfred Kent, M.R.C.S. (England), L.R.C.P. (London), 1890, M.B. (London), 1892, Melbourne, C.1.

Sinn, Henry James, M.B., B.S., 1933 (Univ. Melbourne), M.R.C.P. (London), D.C.H. (London), 5, Fourth Street, Black Rock.

Trethewie, Everton Rowe, M.B., B.S., 1935 (Univ. Melbourne), Children's Hospital, Carlton, N.3.

Davis, Harry Lyall Elderton, M.B., B.S., 1922 (Univ. Melbourne), Natimuk.

Spring, William Emmet, M.B., B.S., 1936 (Univ. Melbourne), 116, Nicholson Street, Fitzroy, N.6.

Obituary.

LESLIE FETHERSTON.

DR. LESLIE FETHERSTON, whose death was recently reported in these pages, was a man who lived up to the highest ideals of the medical profession, and who, by his singular devotion to their welfare, won the affection of the people of his district.

Fetherston began his education at Fort Street School, then located at Observatory Hill, Sydney. After passing the junior and senior public examinations and the entrance examination to the Public Service of New South Wales, he entered the Public Service. He began his Arts course as an evening student at the University of Sydney. Owing to eye trouble he was compelled after two years to abandon the course. He began to study law, but had to give it up for the same reason. Later on he secured a transfer to the staff of the Public Library of New South Wales. He arranged to do night work at the library and was able to attend lectures at the medical school in the day-time. In spite of the difficulties of this arrangement he eventually graduated as Bachelor of Medicine in 1913. Some of the subjects of his first year in medicine were

accepted as subjects for the third year Arts course, and he had the satisfaction of gaining his Arts degree in 1908. After graduation he secured resident appointments at Sydney Hospital and the Paddington Women's Hospital. Thus equipped, he settled in practice at Scarborough, on the south coast of New South Wales. Excepting for a period in 1925 when he journeyed to England to pursue some post-graduate studies, he remained in Scarborough until the time of his death.

During the financial depression few places were more seriously affected than the towns on the south coast of New South Wales in the coal-mining area. Almost the whole adult population was unemployed and the burden that had to be borne by members of the medical profession was very great. Eventually, but not until almost the end of that troublesome period, the Government made arrangements for some payment to be made to medical practitioners in these distressed areas for their services to the unemployed. Fetherston practised in one of the most severely affected towns, and he devoted himself entirely to the welfare of the unhappy people living around him. Small wonder was it that they loved him and mourned for him when he was gone. He died away from home, and at the time of his funeral all the mines in the vicinity of his home were closed down—a spontaneous tribute testifying, as nothing else could, to the respect and affection in which he was held.

Dr. F. C. Crosslé writes:

If ever a man truly followed his vocation, it was the late Dr. Leslie Fetherston. He was the people's doctor. They owned him, body and soul, and it is my everlasting regret that he has paid the penalty that such exacting work demands. He spent his life amongst the working people, first of all at Bowning and then at Scarborough. The latter was a trying practice, with many houses off the tracks on the mountainside, but even if the way were long, his words of cheer and comfort were never short. He cured the sick with patient investigation and comforting words.

He was a marvellous obstetrician, and his judgement was always correct. He followed the teachings of Dr. George Armstrong and the traditions of the Royal Hospital for Women, where he had occupied the position of medical superintendent, and his results showed how nobly his teaching and tradition had been upheld. I regret to record that he was haunted by some of the worst fractures I have ever seen, and somehow he converted his nightmares into respectable realities. That was his way! There was nothing sensational in his methods, but he always arrived by following the beaten path. To the last he adhered to his old Clover's inhaler for the administration of ether, and only a few weeks ago he remarked with a smile whilst giving an anæsthetic: "I suppose they would call me old-fashioned." I knew what he meant, and nodded and smiled in return. It was a good anæsthetic; the relaxation was perfect.

When studying at the university he also worked at the Public Library. There he came in contact with the late Christopher Brennan, the late Professor Brereton and J. J. Quinn, the present parliamentary librarian, and through this contact he gained a wide outlook on life, which permitted him to understand and pardon all the vicissitudes of human conduct. Later, when he was medical superintendent of the Royal Hospital for Women, he had the good fortune to fall in love with Miss Beatty, the matron, whom he subsequently married.

"Feather", as we called him, was the first honorary medical officer of the Illawarra Cottage Hospital, which was opened in 1917. His careful attendance, his skill and cheerfulness, earned him the respect and love of both patients and staff. During the past eight years he had been the honorary secretary of the South-Eastern Medical Association. He was always elected with applause, and was the most diplomatic of secretaries.

Every year he went to Melbourne to enjoy his favourite recreation of racing. As long as the "Cup" was in sight, he never grumbled at his long hours of work; but this year he was forced to go to Katoomba for a rest; and alas! destiny has taken him away from us. To his wife, who, by her tact and care, helped him to conduct his practice so efficiently, is given all the sympathy of his colleagues, and we know, by the depth of our own sorrow, how his loss must be affecting her.

Correspondence.

CHOLECYSTECTOMY: A MODIFIED TECHNIQUE.

SIR: I have used as follows a modified technique in cholecystectomy.

Expose gall-bladder. Define and ligate cystic duct and artery. Apply firmly Doyen's clamp in close apposition to liver along peritoneal attachment of gall-bladder to

liver, so that points of clamp meet ligature securing cystic duct and artery. Apply bowel clamp parallel to Doyen's clamp one-twelfth of an inch or less from latter. While assistant steadies Doyen's clamp and makes gentle downward traction, cut between clamps, applying scalpel blade in close apposition to Doyen's clamp. Apply a gall-bladder clamp to cystic duct close to its ligature. Cut across between this clamp and ligature. The gall-bladder is now free and is removed with its clamps *in situ*. With full curved round-bodied needle threaded with six to eight inches of number 2 chromic catgut, transfix and tie at end of Doyen's clamp adjacent to cystic duct ligature. With same thread lightly oversew Doyen's clamp to extremity of previously severed gall-bladder attachment.

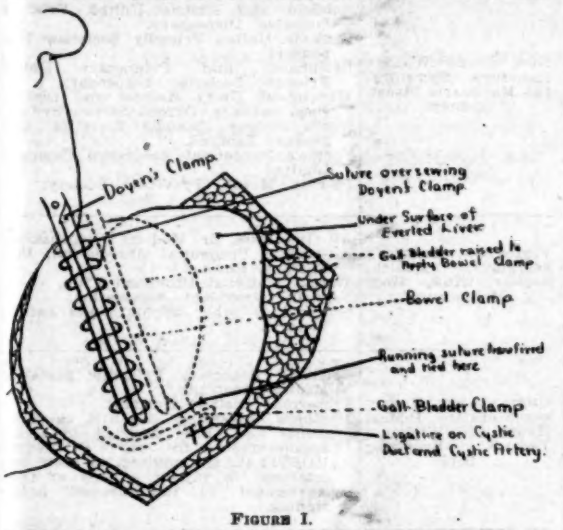

FIGURE I.

Position of Doyen's clamp and ligatures after the removal of the gall-bladder. (The site of the gall-bladder and clamps is indicated by dotted lines.)

Withdraw Doyen's clamp; pull running suture tight and lock. A thin bloodless line of peritoneal tissue will now be found to represent the previous attachment of the gall-bladder. The advantages for the method described are: (i) there is no oozing of blood, such as occurs during dissection of gall-bladder from liver; (ii) a running suture can be applied in about one-quarter of the time occupied by the somewhat tedious method of dissection; (iii) there is no possibility of puncturing the gall-bladder.

It is obvious, of course, that this new technique is not suitable for every case. It will be found of value in many cases of empyema of the gall-bladder, for a minimum of soiling of tissues is incurred.

Yours, etc.,

CECIL F. TUCKER, M.B., B.S.

Brighton, Victoria, October 30, 1937.

IN MEMORY OF HARRY HARRIS.

SIR: Several years have gone by since I began, here in Vienna, to take a keen interest in the publications of an Australian, whose name since has become famous far beyond the border of Australia—Samuel Harry Harris, the man whose efforts saved days and weeks of post-operative suffering to the patient, and who gave us surgeons the boon of his prostatectomy with primary closure of the bladder.

How well I recall the vision of the little man with the keen face and kind eyes, the extraordinary dexterity of his hands and the amazing geniality of his work! It is a long way from Sydney to London and to Vienna, but it could not stop him from coming over and undertaking the hardship and expense of carefully training some of his colleagues in England, and by special favour, myself here in Austria, to master his art. The Harris prostatectomy has become an indispensable asset to surgical urology; it is making its way in many countries, and here in Vienna it is beginning to be much appreciated and even envied by medical circles. We in Europe have as yet to follow the lines of private teaching, and in this are a long way behind in comparison with the fifth continent.

Christmas is approaching, and with it the first anniversary of his much regretted death. It is in lasting and thankful memory of him, in a very real appreciation of his work and in genuine homage to the country whose God-sent son he was that I write these few lines and address them to Australia and the Australian medical world.

THEODOR HRYNTSCHAK,
Lecturer at the University,
Undated. Vienna, Austria.

Post-Graduate Work.

REFRESHER COURSE IN ADELAIDE.

THE Adelaide Permanent Post-Graduate Committee announces that the refresher course will be held at Adelaide from May 23 to 28, 1938. A further announcement will be made at a later date.

LECTURES IN SYDNEY BY DR. KELLOGG SPEED.

THE New South Wales Post-Graduate Committee in Medicine has made arrangements for a series of four lectures to be delivered during the fortnight commencing February 21, 1938, by Dr. Kellogg Speed, Professor of Clinical Medicine, Rush University, Chicago, United States of America.

The programme is as follows:

Monday, February 21, at 4 p.m., in the Robert H. Todd Assembly Hall, 135, Macquarie Street, Sydney: "Unhappy Results in the Treatment of Fractures".

Tuesday, February 22, at 8.15 p.m., in the Robert H. Todd Assembly Hall, 135, Macquarie Street, Sydney: "Compression Fractures of the Vertebræ, with a Short Talk on the Mechanism of Fractures". Also a film on the first aid treatment of fractures of the lower extremities.

Wednesday, March 2, at 4 p.m., in the Robert H. Todd Assembly Hall, 135, Macquarie Street, Sydney: "Fractures about the Elbow Joint".

Thursday, March 3, at 8.15 p.m., in the Robert H. Todd Assembly Hall, 135, Macquarie Street, Sydney: "Injuries of the Knee Joint, Exclusive of Fractures". Also a film on the surgical treatment of chronic osteomyelitis.

The fee for the four lectures will be £1 1s., and for a single lecture 7s. 6d. Application to attend these lectures should be made to the Secretary, New South Wales Post-Graduate Committee in Medicine, University of Sydney.

Proceedings of the Australian Medical Boards.

QUEENSLAND.

THE undermentioned have been registered, pursuant to the provisions of *The Medical Acts, 1925 to 1935*, of Queensland, as duly qualified medical practitioners:

Pro-Copis, George Sandford, M.B., 1936 (Univ. Sydney), Proston.

Rainbow, James Manning, M.B., Ch.M., 1924 (Univ. Sydney), Brisbane.
Donaldson, William Edward, M.B., B.S., 1925 (Univ. Melbourne), Brisbane.

Diary for the Month.

JAN. 4.—New South Wales Branch, B.M.A.: Council (Quarterly).
JAN. 6.—South Australian Branch, B.M.A.: Council.
JAN. 10.—New South Wales Branch, B.M.A.: Executive and Finance Committee.
JAN. 14.—Queensland Branch, B.M.A.: Council.
JAN. 28.—Queensland Branch, B.M.A.: Council.
FEB. 1.—New South Wales Branch, B.M.A.: Organization and Science Committee.

Medical Appointments.

Dr. J. V. Duhig has been appointed Professor of Pathology in the University of Queensland.

* * *

Dr. J. Gribben has been appointed Government Medical Officer at Canowindra, New South Wales.

* * *

Dr. J. M. Dwyer has been appointed Honorary Research Assistant to the Institute of Medical Science of South Australia.

* * *

Dr. R. G. Woods has been appointed Official Visitor to the Mental Hospital at Kenmore, pursuant to the provisions of the *Lunacy Act of* 1898, of New South Wales.

* * *

Dr. D. D. Cade has been appointed, under the provisions of the *Lunacy Acts of* Victoria, Superintendent of the Mental Hospital at Janefield, Victoria.

* * *

Dr. G. Courtney has been appointed Protector of Aboriginals for Palm and Fantome Islands, pursuant to the provisions of *The Aboriginals Protection and Restriction of the Sale of Opium Acts*, 1897 *to* 1934, of Queensland.

* * *

Dr. C. Stanley has been appointed Superintendent of the receiving wards at the Bendigo and Northern District Base Hospital, under the provisions of the *Lunacy Acts* of Victoria.

* * *

The undermentioned have been appointed Honorary Clinical Assistants at the Adelaide Hospital, Adelaide, South Australia. Medical Section: Dr. R. T. Binns, Dr. M. E. Chinner, Dr. E. F. Gartrell, Dr. I. S. Magarey, Dr. G. B. Sangster, Dr. R. F. West, Dr. A. H. White; Surgical Section: Dr. N. S. Gunning, Dr. G. M. Hone, Dr. J. E. Hughes, Dr. W. W. Jolly, Dr. G. E. Jose, Dr. S. Krantz, Dr. A. C. McEachern, Dr. D. G. McKay, Dr. N. H. Munday, Dr. G. H. Solomon; Neuro-Surgical Clinic: Dr. J. E. Hughes; Dermatological Section: Dr. W. Gilfillan, Dr. L. W. Linn; Vaccine and Asthma Clinic: Dr. J. E. Bateman; Ophthalmological Section: Dr. T. L. McLarty, Dr. S. Pearlman; Tuberculosis Section: Dr. C. B. Sangster, Dr. A. C. Savage; X Ray Section: Dr. B. S. Hanson; Radium Section: Dr. J. C. Mayo.

Medical Appointments Vacant, etc.

For announcements of medical appointments vacant, assistants, *locum tenentes* sought, etc., see "Advertiser," pages xiv to xvi.

DEPARTMENT OF PUBLIC HEALTH, WESTERN AUSTRALIA: Medical Officer.
THE QUEEN'S (MATERNITY) HOME INCORPORATED, ADELAIDE, SOUTH AUSTRALIA: Resident House Surgeon.
THE UNIVERSITY OF MELBOURNE, VICTORIA: Staff Vacancies.
WESTERN AUSTRALIAN PUBLIC SERVICE: Junior Medical Officer.

Medical Appointments: Important Notice.

MEDICAL PRACTITIONERS are requested not to apply for any appointment referred to in the following table without having first communicated with the Honorary Secretary of the Branch named in the first column, or with the Medical Secretary of the British Medical Association, Tavistock Square, London, W.C.1.

BRANCHES.	APPOINTMENTS.
NEW SOUTH WALES: Honorary Secretary, 135 Macquarie Street, Sydney.	Australian Natives' Association. Ashfield and District United Friendly Societies' Dispensary. Balmain United Friendly Societies' Dispensary. Leichhardt and Petersham United Friendly Societies' Dispensary. Manchester Unity Medical and Dispensing Institute, Oxford Street, Sydney. North Sydney Friendly Societies' Dispensary Limited. People's Prudential Assurance Company Limited. Phœnix Mutual Provident Society.
VICTORIAN: Honorary Secretary, Medical Society Hall, East Melbourne.	All Institutes or Medical Dispensaries. Australian Prudential Association, Proprietary, Limited. Mutual National Provident Club. National Provident Association. Hospital or other appointments outside Victoria.
QUEENSLAND: Honorary Secretary, B.M.A. House, 225, Wickham Terrace, Brisbane, B.17	Brisbane Associate Friendly Societies' Medical Institute. Proserpine District Hospital. Members accepting LODGE appointments and those desiring to accept appointments to any COUNTRY HOSPITAL are advised, in their own interests, to submit a copy of their Agreement to the Council before signing.
SOUTH AUSTRALIAN: Secretary, 178 North Terrace, Adelaide.	All Lodge appointments in South Australia. All contract Practice Appointments in South Australia.
WESTERN AUSTRALIAN: Honorary Secretary, 205, Saint George's Terrace, Perth.	All Contract Practice Appointments in Western Australia.

Editorial Notices.

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